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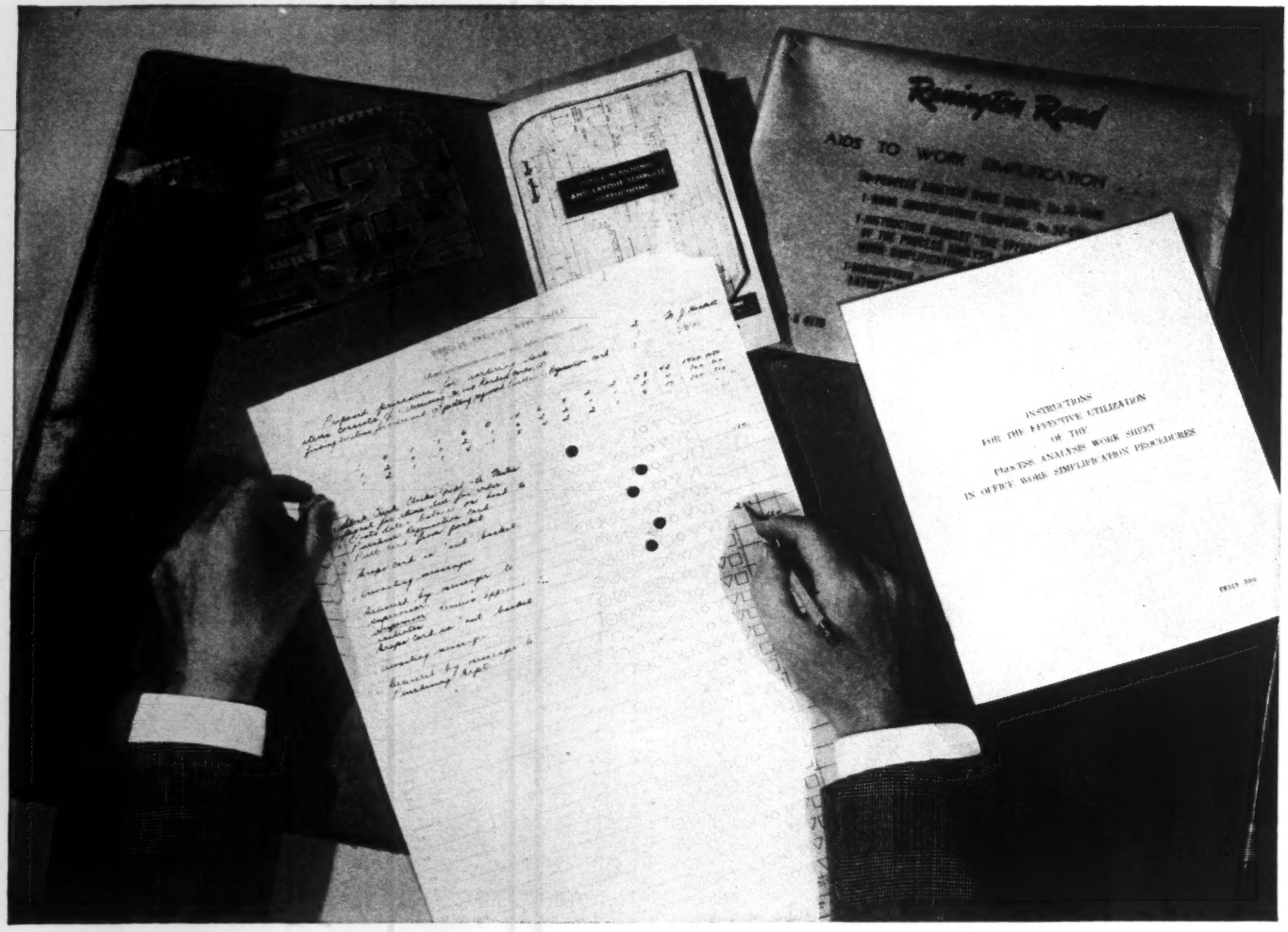
JANUARY 1952



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THE 1952 MANAGEMENT FORECAST

BY LEADERS OF INDUSTRY AND MANAGEMENT

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Board Chairman and President, Stewart-Warner Corporation

By THOMAS ROY JONES
President, Daystrom, Inc.

WITH THE government's continued program of raw material restrictions, production regulations, and wage controls, industry in 1952 will be forced to place increasing dependence on the securing of defense contracts. Management will also be faced with finding new methods for reducing costs and increasing production efficiency while converting to the production of military equipment.

Decreased earnings will result in many cases so that managements which have made a practice of keeping their stockholders well informed will find this practice paying benefits in better and wider understanding of the problems industry is facing.

Today's business man has an increasing responsibility to acquire an understanding of the basic economic problems confronting the country and then to make it his personal obligation to see that he shares this understanding with his associates and his employees. This becomes even more important in a year such as 1952, when forthcoming elections will bring a deluge of political propaganda.

By FREDERICK V. GEIER
President, The Cincinnati Milling Machine Co.

IN 1952, management will face not only the usual problems of engineering, manufacture, and distribution, but many abnormal problems peculiar to the semi-peace, semi-war economy under which we will have to operate. Certainly the year will bring into sharp relief the importance of machine-hour and man-hour productivity and the holding of unit costs to economic levels under variable and unfavorable manufacturing conditions.

American industry is not in as good a position to make every hour's work count as it should be because of the fact that fully 90% of the metal-working machine tools in use are of pre World War II construction or design. In contrast, the newer types of machine tools are generally rated as one-third more productive. As a result, the use of the 90% over-age machines means that production is costing America over one billion dollars a year more than if the newest methods and equipment were installed. Whether viewed from the standpoint of raising the Defense potential or of lowering the cost of products people need, management needs to find a way to bring the nation's productive equipment nearer to the best practices that we know.

ADVANCED MANAGEMENT is proud to present its third annual management preview of the new year.

By CHARLES P. McCORMICK
President, McCormick & Co., Inc.

WHAT WE DO in 1952 in the United States will, in a great measure, affect the future of the entire world. While we are fighting Communism, there are many who willingly or unquestionably accept Socialism as their pattern of life. Regardless of whether business is good, taxes are high, wages are frozen, prices are controlled, or profits are smaller, these are minor issues to the threat of Socialism that is infiltrating into our way of life.

The United States, young in its concept of the right of the individual and its full protection by law, is now being threatened by those who would willingly accept Socialism in order to defeat a common enemy—Communism. Nothing would be worse for our thinking, our Country, and in fact the World, than for the United States to go Socialistic. One cannot push off the fact that no Socialistic state has ever created such an industrial force or such great power as the United States under our competitive private enterprise system and freedom of the individual.

Therefore, the elections in 1952 will have a great bearing on which way America is going to go. The road of

success up to the minute, the free and liberty loving road, is slowly getting entangled with the threads of Socialistic trends, government controls, etc. There are times when controls are necessary, and there are times when high taxes are necessary, and there are times when physical sacrifice is necessary to keep our Country strong. But what I am worried about is the trend toward Socialism in the normal course of events.

Socialism is a greater threat to the United States in 1952 than Communism. Communism has been exposed to a greater degree, and it can look forward to further condemnation. But the American people, unfortunately, do not realize or recognize the unwholesome facts about the Socialistic states.

I am hopeful that the spotlight of television, and other media, during the forthcoming presidential campaigns will serve to smoke out the termites who are seeking to undermine our American way of life and expose them for what they are.

However, I must admit that I am optimistic despite the current and international turmoil. I firmly believe that the United States of America will succeed in its fight to remain free and unfettered and thereby demonstrate the inherent power of its people who desire a peaceful and normal life under conditions guaranteed by our Constitution.

By CHARLES F. ROOS
President, The Econometric Institute, Inc.

IN 1952 NEW highs in production will be set in capital goods production and by individual companies which are largely geared to war production. Total production and consumers' incomes will rise.

At the same time, the year 1952 is likely to be characterized by over-expansion in plant and equipment, and complete satisfaction of deferred demands for consumers' durables and housing created during World War II and the subsequent years of extraordinarily high formation of households. While some improvement in production is likely from the current depressed levels of non-durable goods, such as textiles and clothing, this recovery is apt to fall considerably short of the highs made in October and November of 1950. The average producer and distributor of civilian consumers' goods will face highly competitive markets.

By ERIC JOHNSTON
President, Motion Picture Association of America, Inc.

ANY FORECAST AT THIS TIME depends on our economic defenses. Together, the United States and countries associated with us are now building the strength that freedom must have if it is to survive and endure. Although communism hates freedom, it respects force.

Our defense against communist aggression must be total—a powerful, unbeatable military machine and a strong, productive economy. Without the latter, the benefits of the former will be lost. The billions poured into military preparations will buy not strength but weakness if these expenditures are permitted to cause inflation, and if that inflation is permitted to riot through the economies of the free nations.

As of this writing (December 6), the inflationary pressures of our economy are in hand. Prices, wages and costs are fairly evenly in balance. But the danger is not over — despite the tendency in some quarters to think that it is.

Instead, there will be a mounting crescendo of inflationary pressures during the coming year. Military goods will be pouring from the assembly lines in ever-mounting volume; although taxes have increased, substantial deficit financing still seems inevitable; more people will be working and for longer hours, with payments to employees reaching about 200 billions, compared to 180 billions this year and 153 billions in 1950; steel for consumer goods has been cut back about 50 percent from pre-Korea levels and copper about 10 percent.

Surely these facts lend no substance to any theory that inflationary forces will not grow increasingly severe next year.

To be successful, the fight against inflation in a preparedness economy must be carried on over four fronts in an integrated attack by (1) increasing production, (2) restricting the demand for goods, (3) holding down costs of production and distribution, and (4) maintaining confidence that stabilization will work.

If our economic defenses are kept strong enough to hold inflation in check, 1952 should be a highly productive year that will see us well on our way to the strength we need to survive despite the menace of imperialistic communism. But if we let down our economic defenses, the results will be disastrous for all of us.

By WALTER D. FULLER
Chairman of the Board,
The Curtis Publishing Company

JUST AS THE BUSINESS situation a year ago appeared foggy, so it appears today, except that the fog has now reached a point where it is almost misty.

There seems every probability that the gross volume of business will be substantial in 1952 and will likely be in excess of the volume of 1951. However, it must be borne in mind that the increase in volume and the relatively high productivity is steadily wearing out the plant and equipment of American manufacturers, that depreciation allowances are inadequate in many cases, and that the simply terrific tax burden is causing many concerns to restrict expansion, sales activities and research due to the necessity of maintaining some moderate basis of net earnings in order to be fair to stockholders. There are, of course, many exceptions to this situation which are constantly pointed to by various politicians and labor leaders, but these exceptions merely emphasize that the great mass of concerns are going to find it very difficult to continue to follow the course which has built American business to its present high standards.

To me it seems evident that we have simply got to do our best to mark time through 1952 and the first six months of 1953, at which date the so-called excess profits tax will expire and thereby release business and industry from this restraint to progress. Most informed people will agree that it is the growth companies—those which are new and growing and those older companies which have faced the necessity of reorganization and rebuilding—that suffer so terribly from the unfairnesses of this tax law. Until they are released from this anchor in the mud of recession, we cannot expect our successful business system to work at anything like its maximum of accomplishment.

The excess profits tax law is misnamed. It does not primarily tax the profits of the munition makers — war profiteers, etc.—renegotiation takes care of them. It is indescribably stupid because its rates are so high (30% on top of the regular rate of 52%) that few companies will have such profits—they

will spend these dollars which cost them at most but 18¢ rather than pay the tax —hence the Government will lose all taxes on normal advancing net gains of the growth companies. To get a theoretical extra 30% they sacrifice that and, in addition, they lose the 52% they could secure without this absurd tax.

What I have just said applies to almost every line of business. It is particularly true in publishing and in advertising and selling which are such important factors of progress. Such concerns are essentially based on personalities and ideas rather than being based upon fixed assets in mills and factories. To a substantial degree they are the sparkplugs of production and progress and when they are held back artificially, as is the case with the excess profits tax, they are not only unable to move ahead themselves, but since they are the leaders, this handicapping of them holds back all the rest of the economy.

By CLEO F. CRAIG
President, American Telephone and Telegraph Company

BELL SYSTEM PROGRESS and problems in 1952 are likely to be along much the same lines as in 1951. Demand for telephone service keeps right on growing and an increase in the already very heavy construction program will be required to meet it. Today the nation has more telephone service of high quality than ever before, but even so the load on existing facilities is enormous and much remains to be done to meet the full needs of all present and waiting customers.

First attention will continue to be given to military and defense communication projects. These are many and varied, for the telephone is vital to every phase of the defense program, including operations of the Armed Services, Civil Defense organization in communities all over the country, and the productive efforts of American industry and agriculture.

To do their big job well the telephone companies must keep themselves in first-rate financial condition. This means that the charges for telephone service must be sufficient — and wherever they are not sufficient, they need to be made sufficient —to cover all the costs of doing business and provide a return that is fully satisfactory to investors.

It is also extremely important that in the months ahead this essential industry be able to obtain the raw materials it needs, in adequate amounts. We need more materials than we are obtaining at present. The Bell System is already doing everything it can to conserve the more critical materials and extend the use of substitutes.

Basic to all future telephone progress is good old-fashioned American freedom to go ahead and do the best job possible. The greater that freedom the more we shall accomplish. Our research program is constantly producing the technical means for providing better service, more service and new types of services at lower cost than would otherwise be possible. Telephone employees continue to grow in experience, knowledge and skill and the whole organization is on the alert. We expect a steady up-hill pull to do all that is asked of us in 1952 but I am confident the result will be to the credit of the industry and greatly to the advantage of the nation we serve.

RESEARCH INSTITUTE OF AMERICA PREDICTS FOR '52

No war with Russia.

A better year for business than 1951.

A continuing uptrend in business in 1952.

Building will be below the 1951 average, but only slightly.

Wage costs will rise . . . and many industries won't be able to pass them on in higher prices.

Labor friction will run higher, even in companies with a long record of peaceful union relations.

The tax load will increase in '52 . . . LOCAL, not federal.

Prices, over-all, will be wiggling upward three to five percent through the year . . . but there will be no inflationary spurt.

The Defense Production Act will be extended by Congress.

The Capehart amendment will survive new attacks.

Decontrol is not in the cards for '52 . . . though Congress will make some token gestures in that direction.

By C. J. BACKSTRAND
President, Armstrong Cork Company

GENERAL BUSINESS SHOULD continue at a high level in 1952, but there may be considerable variation between one field of activity and another. Such differences may occur not only between individual lines of business, but in respect to particular products within those lines. This spotty situation will be caused by two factors. In the first place, overall defense activities will boom but even some of them may vary in volume. Secondly, civilian business has to meet the three-fold challenge of inventory liquidation, cut-backs in the usage of certain raw materials, and the changed buying mood of consumers who have become choosy and cautious after finding the recent alarms of shortages to be greatly exaggerated. In the main, however, a strong potential for good business exists in rising consumer incomes and a substantial amount of personal savings that is accumulating.

Our Company's situation parallels that of the economy as a whole. The outlook is mixed. In the construction industry, for example, there are varying influences. In new residential building, where demand has subsided somewhat, and in commercial construction, where controls have their adverse effect, we can expect a lower level of activity. However, in the general repair and modernization fields, in school construction, and in industrial building, there is every indication of a strong market. In other segments of our business entirely apart from building construction, we believe that substantial sales volume can be realized through intensive selling efforts.

By JOSEPH H. McCONNELL
President, National Broadcasting Company

THERE IS SLIGHT PROSPECT that the international situation will ease appreciably in 1952. Even an armistice in Korea would not lessen the compelling need for the nation to strengthen its defenses. Our safety, and that of all the United Nations, rests upon a sustained production effort extending well beyond the new year.

The radio and television industry will continue its contribution to this drive for security through strength. Its technicians will serve with the armed forces on all bases and fronts; its laboratories and production lines will step up the output of electronic implements for defense; its vast radio and television networks will entertain, and inform, and warn, if necessary.

The industry is in a stronger position today than ever to fulfill all requirements. Combined gross revenues for radio and television will reach a record high this year. From all indications, radio and television set sales will continue their steady climb.

The nation today has 96,000,000 radio and 15,000,000 television sets. They link us together, through the airwaves, in a closer union than any country has ever known.

Internally, the industry has conquered some formidable problems. It is prepared in 1952 to grapple with others.

NBC's heavy financial sacrifices in building television began paying off in 1951 and will continue to do so in the new year. Gains in TV time sales will give us the chance to move into daytime TV. Even the early morning hours will see important new programs. News and special event shows will come into increased importance on TV, keeping abreast of the average citizen's growing interest in world affairs. Television, which accomplished a big job in 1951 in recruiting the top names of all branches of entertainment, will seek new and original techniques in 1952. And, new stars—many starting in supporting roles in various program classifications—will emerge.

Radio, too, will show strong gains in 1952. We at NBC are developing patterns that will keep radio strong for the future. We are now selling radio on its proven value as an advertising medium. We believe that its progress will continue, that it will remain an enduring and vigorous partner of television.

By FRANK M. PORTER
President, American Petroleum Institute

THE PETROLEUM INDUSTRY enters the new year with confidence in its ability to supply the petroleum needs of this country. Everyone is hopeful, of course, that there'll be no further disruptions of world peace, but should other difficulties arise the petroleum industry will approach them with complete recognition of its vast responsibilities to the armed forces and the American people.

The year 1951 created many new petroleum records. Crude oil production went over the six million barrel per day mark for the first time in the industry's history. The transportation and refining branches of the industry moved ahead in corresponding measure to supply the record-breaking demand of seven million 460 thousand barrels per day. It is interesting to note at this point that total demand now stands at 71 per cent more than it was in 1941. That is an indication of the mounting pressure under which oil men have been operating for the past decade.

For 1952, available forecasts indicate a further increase of at least five per cent in over-all demand. To the layman, this may not seem very large, but coming as it does on top of the biggest year in petroleum history, it means that oil men will have to produce, transport, refine and distribute almost 400,000 barrels per day more in the new year than they did in 1951.

Financing the necessary expansion to meet this increasing demand is a considerable problem from the point of view of production and refining facilities; but to move and store the products as close as possible to points of consumption, particularly the winter's requirements of home-heating oils, adds further to the financial problems. This expansion requires extremely large amounts of steels and other materials which the industry is finding increasingly difficult to obtain.

The industry's record in meeting such problems in the past inspires confidence in its ability to do it again in 1952. It is a challenge, but so long as oil men can look forward to operating under our system of freedom and free enterprise, they will accept that challenge unhesitatingly—mindful of the tremendous job ahead and the financial responsibilities involved.

> Straight thinking is especially necessary for each and every one of us as consumers — and we are all consumers. In our role we can knock the entire 1952 economy completely haywire with another foolish buying splurge. But, if we can control ourselves, our standard of living will continue to rise.

By MARTIN R. GAINSBRUGH
Chief Economist,
National Industrial Conference Board

AGAINST A BACKGROUND of unexpected recession in several major areas of business during 1951, business planners and the professional analyst alike approach the outlook for 1952 gingerly and with humility.

For the outlook of economists on the probable course of business in the months ahead, I can summarize for you briefly the views of The Conference Board's Economic Forum. Members of the Forum expressed the conviction that in the all-important sector of consumer expenditures a relatively high savings rate should prevail. The downturn in retail sales relative to disposable per-

sonal income experienced in 1951 may represent a more or less permanent characteristic of the garrison state. On the basis of rising income, however, the Forum believed there would be a further modest rise in retail trade in 1952, but no bonanza.

On balance, the Forum also believed that the rate of capital formation in 1952 will be lower than in 1951 because of reduction in housing and other non-defense construction, and a lower set-aside for inventories. Government spending was expected to increase as much as $25 or $30 billion. But because of off-setting declines in other sectors of the economy, no severe price pressure appears imminent for 1952. The Forum did not appear to be greatly concerned over the problems of an inflationary gap, since the economy is now in a surplus position with regard to a wide range of consumer industries and a growing number of raw materials.

The Conference Board survey of management opinion on their probable rate of activity in 1952 has just been tallied and yields generally similar results. Two-thirds of the participating companies expected higher dollar billings during the first half of 1952 than during the same months of 1951. For most companies the rise in billings was expected to result from greater volume rather than higher prices. In general, managements are more fearful of rising wage costs than of rising materials costs.

Business expects capital expenditures for the first half of 1952 to approximate their expenditures during the first half of 1951. Increases resulting from expanding defense business should about offset decreases due to the completion of post-war expansion programs. The trend of inventories for both metals companies and non-metals companies was expected to be downward over the next six months.

Expectations of a further rise of perhaps $25 billion in the defense spending rate, plus the more or less general opinion that volume in the civilian sector has reached its trough, argue for a general rise in activity and prices. This is the consensus.

As a final note—looking ahead to the first few months of 1952 — the consequences of the long delay in the deflation of business expectations to fit the facts of 1951 may not yet be completely obliterated. Lowered resistance to increased wages and other costs during a year-and-a-half of inflationary expectations has resulted in a price level that nobody likes, and that nobody can now do much about. Strong price resistance and opportunistic buying have characterized the consumer sector throughout the fourth quarter. It may take some months more of rising defense before the consumer is reconciled to the price level—and 1951 furnishes ample evidence that the consumer sector still dominates the business scene.

1952 WILL BE EXPENSIVE

Our government is pledged to spend a lot of money, and when the government spends, it is spending the only money it has, the money contributed by Mr. and Mrs. John Q. Taxpayer, your money.

In addition to the normal expenses of government which have put our country in the red by more than $7,500,000,000, we are now faced with astronomical costs for rearmament. Every American will have to dig deeper into his pocket to meet these expenditures.

The cold war is costing more than twice as much per soldier as during World War II, $17,060 per man. The armed services are spending about $60,000,000,000 a year. This doesn't include about $9,000,000,000 for the mutual defense assistance program, the Atomic Energy Commission or similar projects.

Inflation accounts partly for these high sums. The Army figures it is now paying at least twice as much as it used to for the same item. The Army ration—the cost of feeding one man for one day—was 47 cents in World War II. Today it is $1.16. The Signal Corps today pays $13,687 for the same radio set it used to buy for $5,053. The Garand rifle used to cost $31 and now costs $95.

The average cost of our standard medium tank in World War II was about $55,000. Today it is $240,000.

Today it costs $293,000,000 to equip an armored division. In World War II it cost $40,000,000.

The Navy now pays $22,500,000 for a submarine compared to $4,800,000 during the last war. The new aircraft carrier, United States, will run up a bill of $235,000,000. Most expensive World War II vessel was the battleship Missouri, $105,000,000.

It's true the figures are hefty, but they do mean you—you and the millions of other Americans, all of us, who are going to pay these charges.

That's why we say 1952 will be expensive.

BANKERS FEDERAL SAVINGS
& LOAN ASSOCIATION

By CHARLES E. WILSON
Director of Defense Mobilization

AS THE YEAR 1952 BEGINS, defense mobilization moves into its second major phase—mass production of tanks, planes and guns to protect the nation's security against the black threat of communism.

In 1952 we will have more guns and less butter. As the gigantic production machinery of America shifts into high gear, it will consume vast quantities of raw materials. Cutbacks in civilian production, especially of durable goods, to 50 per cent of its pre-Korean rate, therefore becomes necessary.

The pinch is here. But the sacrifices the nation is being called upon to make are small compared with the great stakes involved, namely to prevent a third world war or to win it if it comes.

As 1952 begins, my major worry is in the field of stabilization. If runaway inflation were to take hold in America, the nation would go bankrupt and Stalin

would realize his dream of conquest without firing a shot. That is why numerous steps have been taken to stabilize prices, wages and credit; and why higher taxes have been imposed.

During 1952 the whole basic economy of the United States will be further enlarged. We are increasing steel production from 100,000,000 tons annually to nearly 120,000,000; we are doubling the output of aluminum; we are increasing electric power by about 40 per cent; and expansion proceeds in chemicals, rubber, oil drilling and refining, freight car construction and other foundation stones of an industrial civilization. During 1952 we shall receive many pieces from this bigger pie we are baking.

Important difficulties were encountered in 1951 and will plague us through most of 1952. They are being resolutely attacked. Even in so rich a country as ours, there is not enough steel, copper and aluminum to fulfill all our needs, hence the supplies of these basic metals must be apportioned, with defense needs getting first priority.

New weapons — such as jet engines, guided missiles and atom bombs — require large amounts of alloying metals like nickel, tungsten and molybdenum. The United States does not possess sufficient amounts of these metals, hence the markets of the world must be searched for them. Whenever possible, substitutes must be employed, especially in civilian uses.

In 1951 we suffered because of a lack of machine tools, especially the complicated new tools necessary to make new weapons. The machine tool industry has had to have new price schedules, superpriorities on raw materials, manpower and financing aids, and other incentives to top production. Its output has doubled since Korea and should double again in 1952.

A revolution in the design and manufacture of aircraft has occurred since World War II. That war was fought with piston-engine planes, which are now outmoded. We have entered the age of the jet plane, infinitely more complicated than old-type aircraft. It takes five or six years ordinarily to build a jet plane, from the time it first takes shape in the mind of designers to the time it flies away. In the coming year, we will begin to mass produce jets whose development began shortly after World War II ended.

Production of jet planes, as well as tanks, guided missiles and other modern defense equipment, was retarded in 1951 by design changes. Since the result of these changes is to improve speed, firepower and maneuverability, the pauses in production will insure that the weapons will not be obsolete or obsolescent when they are ready for use.

Moreover, it is not the purpose of defense mobilization to pile up mountains of weapons for which there is no present need. It is our purpose to supply all the requirements of our armed forces, as well as to help supply the forces of our allies, and then to rely on reserve production lines and standby facilities to provide greater production when and if needed.

In deciding last year on a three-year plan for defense mobilization, we rejected the idea of all-out mobilization, which would have thrown millions of people out of work and deprived the Government of tax revenues necessary to carry on our pay-as-you-go program. In 1951, largely as a result of the fact that our rearmament program was a graduated rather than a vertical one, we had relatively little manpower dislocation. In 1952 we are likely to experience a manpower pinch, and we shall need to bring 2,500,000 additional workers into defense production industries.

Admittedly, our three-year program was a calculated risk. It was a gamble that no immediate general war would break out. A year has passed and that judgment has thus far been borne out. Meantime, we have gained enormously in strength, and the risk is thereby lessened. But the danger will not be over until we have reached our peak of strength.

Meantime, I call upon the people of this nation — management, labor, agriculture, consumers, everyone—to buckle down to the great and solemn job that lies before us. We will all have to make sacrifices, but they are petty ones, indeed, compared with the sacrifices, including the supreme sacrifice, we are asking of our men in Korea. Let us all work for world peace by building America's might.

By C. M. WHITE
President, Republic Steel Corporation

1952 will see our nation's industrial might greater and more productive than ever before. This is due in part to the $60 billion of profits which have been reinvested by business and industry during the past five years, much of it for expansion of plants and equipment.

Steel has kept pace with this expansion.

By early 1953 new steel furnaces and auxiliary facilities will be completed which will raise national steel capacity from 82 million tons in 1939 to 118 million tons or an increase of 44 per cent and 32 per cent more than was produced during the peak war year of 1944.

It should follow, therefore, that the supply of consumer hard goods should come close to meeting demand during most of 1952 unless military needs increase materially and absorb steel and other raw materials which otherwise would go into consumer production.

Under these conditions it would seem that whatever usefulness wage and price controls may have served in the past, that usefulness is nearing an end and the law of supply and demand is just about ready to reassert itself. Permanent controls in any degree are a dangerous threat to the freedoms of every citizen and to the well-being of the nation.

The outlook is for a continuation of relatively high levels of production and full employment in 1952. However, many serious problems face us, the solution for many of which hinges directly on decisions made in the Kremlin. Just about as many depend on the policies and actions of our own government. It can only be said with certainty that the business man will have to be "quick on his feet" in 1952 and able to jump in the right direction as forces entirely outside the business sphere exert themselves on his business.

By WINTHROP W. ALDRICH
Chairman, Board of Directors, The Chase National Bank

INFLATION IS one of the oldest of economic diseases. Its causes are known, its symptoms clear and its cures well understood. It results from an increase in money volume, that is to say, in currency and bank deposits, greater than the flow of goods and services to consumers. This excess in purchasing power

not only brings about rising prices but also price and income disparities of such magnitude that economic stability is undermined and grave social injustices created. The basic cure for the disease is to check the increase in the money supply. This can be done by time-tested fiscal, monetary and credit measures.

As an economic problem, inflation presents no difficulties. As a political problem, inflation runs aground on the shoals of self-deception. The reason is that inflation creates an illusion of well-being and prosperity.

Although our economy at the moment is not subject to strong inflationary pressures, the present lull should give no cause for complacency. Liquid assets in the hands of individuals and corporations are still high. Large Federal deficits loom ahead through the years of the rearmament program, state and municipal budgets are still unbalanced, debt continues to increase. Inflation is still a long-run danger. The basic problem remains unsolved.

The basic problem of inflation is to reduce consumer expenditures, the non-essential expenditures of business units on plant, equipment and inventories, and the non-essential expenditures of Governmental units. These expenditures must fall as rearmament expenditures rise. Otherwise everyone will compete for scarce goods and services, and costs and prices will spiral upwards.

Our first anti-inflationary measures must necessarily be directed at consumer spending. It will not be easy to check such spending, since rising employment and wage totals mean rising personal income. Consumer demand can, however, be held in check by appropriate tax, credit and interest rate policies. Tax policy must of necessity rely heavily on the personal income tax.

In the reduction of consumer expenditures, tax policy, both direct and indirect, should be supplemented by credit and interest rate policies. Credit policy should be directed towards preventing further increases in consumer credit and in bringing about a decline. The increase in consumer credit from the low point reached in the latter part of the war has been very rapid, rising fourfold, from about five to twenty billion dollars. This great increase in consumer indebtedness must, of necessity, be viewed as a significant postwar inflationary factor.

By WILLIAM H. RUFFIN
President, National Association of Manufacturers

On the Company or Industry level, the outlook for 1952 is widely varied. Some will be cut back, while many will go ahead at top speed. Extraordinary flexibility and resourcefulness will be required to keep abreast of the tide.

There are many artificial and arbitrary interferences with normal procedures and adjustments, and these will not be thrown off easily.

This is a period when the outlook must be reappraised at frequent intervals. While it now seems probable that the net effect of many forces will be moderately upward, the possibility of excesses and sudden slumps must not be overlooked in planning ahead.

On the general economic level, I expect to see greater total production, maximum employment and minimum unemployment, higher national income and personal income, heavier taxes—as the full impact of recent tax changes is brought to bear—and tighter credit. The squeeze on profits will continue.

Barring global war, I do not expect extreme changes either up or down in 1952.

Industry generally will continue to press its program for such objectives as:

1. Reduction of non-essential government spending and elimination of waste.
2. Pay-as-we-go taxation, calculated to offset defense production outlays.
3. Curtailment of public and private credit expansion of the kind that has been feeding inflation.
4. Increased production, capacity and productivity.
5. Better public understanding.

On the inspirational level, I look forward to a resurgence of individual morality and political integrity. I believe that the American people will demand, and they will get — regardless of partisan politics — a return to the traditional American concepts of personal and political integrity.

I anticipate that management will rededicate itself to American ideals. In so doing, management can avail itself of a dramatic opportunity to defend American homes, American lives and American freedom.

Action also should be taken to remove impediments to the free inflow of commodities to the American market.

Again I want to emphasize that the present lull in inflationary pressures affords no basis for self-complacency. The threat of continued price increases remains very real and is a clear and present danger. The measures which we adopt to ward off this menace must give promise not only of checking inflation but also of preserving our free market economy and of easing the transition from an economy of defense to one of peace.

Inflation is everyman's responsibility. We must all assume our full share of the effort which is necessary to ward off this menacing danger to our economy. We must all be willing to undergo sacrifices for the public good and stand ready to submerge our own individual interests. A strong America, at home and abroad, is an America ready and able to exercise leadership in the field of monetary and economic stability.

By W. H. WINFIELD
Director of Business Research, Monsanto Chemical Company

Prior to Korea there was evidence that the market for automobiles, appliances, and homes was reaching the saturation point. War brought an upsurge in forward buying in every segment of our economy. This was borrowing on future demand as evidenced by the recent slump in shoes, textiles, and home appliances. Civilian demands for durable goods have probably passed their peaks. Industrial construction may reach its peak by mid-1952. Barring an additional shooting war, even the projected level of defense spending may not be sufficient to support the present high level of business activity.

We anticipate a spring upturn in the nondurable goods but beginning with the second quarter of 1952 business should start a decline which may last for sometime.

Since 1942 American business has invested the fantastic amount of $131 billion in plants and equipment — the most extensive and sustained period of expansion and modernization in the history of the world. Sooner or later, whether in 1952 or 1953, we are going to run into overproduction. As a matter of business policy our best course of

action would seem to be to review every expansion program to be sure that we want it 'rain or shine' and to utilize the remaining period of the boom to develop ways and means of lessening the impact of a decline when it comes.

By HAROLD R. BERLIN
Vice-President, Johns-Manville Corporation

THE CONSTRUCTION industry in 1951 operated in one of the most confused years in American economic history, yet year-end records will show that the industry hit an all-time peak in dollar volume. Construction is one of the principal props of the country's economy, embracing as it does residential construction, alteration and repair; defense, industrial, commercial and educational construction; hospital, institutional, social, recreational and religious construction; farm construction; electric power, gas and other utility construction such as telephone, sewage disposal, water supply; conservation and reclamation projects; and highway construction.

It appears now, because of the metal shortages, that there will be an over-all decrease in the amount spent for all types of construction in 1952. New home construction will decline in 1952, but expenditures for residential remodeling and modernization are, for that very reason, likely to increase substantially.

New factory construction, in spite of the unprecedented boom in 1951, will still be going very strong in 1952 partly because of heavy government expenditures for atomic energy and other installations. Though present plans call for enormous expenditures in this class, the scarcity of metals, particularly structural steel, will make it difficult to carry out all plans.

It is commercial and recreational construction which will feel the brunt of metal scarcity most severely in 1952. There will be few new office skyscrapers started during the year, but those under construction will be finished.

Expansion of public utilities has been tremendous in the post-war capital boom and the demand for electric power still seems insatiable. Close to $4 billions was spent on all types of utility construction last year and, in spite of metal scarcities, 1952 construction in this class will be strong.

Another class that will maintain a high level of volume in 1952 is educational construction. The approximately $1.5 billion spent in 1951 may be cut back slightly but the flood of children into grade schools is of such proportions that very few building programs are being reduced in this construction class.

Thus we have a rough idea of what will happen in most construction classes in 1952. Residential volume, however, remains the unknown quantity at the beginning of 1952 as it did at the beginning of 1951.

"But governmental agencies will not, by any means, be the sole factors to determine 1952 home building volume. Grass root pressures and forces may be too strong for government to handle especially in an election year.

"New families are always being formed and, in this country, people are continually on the move to new places where they want to live. These factors create powerful pressures.

"The demand for new homes now is not as great as right after the war because millions of families have been housed and re-housed in the last six years. However, great numbers of American people are continuing to move, and it is from this source that irresistible pressure for home construction develops most rapidly.

"Nothing has occurred since the Korean War began remotely approaching the enormous mass migration which took place during World War II when about 20 million people pulled up stakes and decided to live elsewhere. Nevertheless, great numbers of people have piled into towns and cities at or near new defense construction sites and factories, and will continue to do so provided they can find housing.

"Defense installations can't be manned unless adequate housing is built, and only private enterprise, not government, has ever been able to perform that job with speed and efficiency.

"In addition to this pressure for housing for defense workers, there is another and even greater migration of people that has been gathering force for a generation and shows no sign of diminishing. That is the migration to the suburbs —a movement so fundamental in this automobile age that it cannot be halted.

"Thus the need for new homes continues all over the country in this decade when population right now is growing at the rate of 2½ million per year. In spite of material scarcities and, given no further intensification of the Cold War, and no important additional government restrictions, it is likely that new home construction in 1952 will approximate at least the 800,000 figure that is now considered the best guess."

By IRVING S. OLDS
Chairman, Board of Directors, United States Steel Corporation

THE AMERICAN steel industry, of which United States Steel is the largest single member, can justifiably be proud of its outstanding production record in these days of national emergency. During 1951 United States Steel produced more steel than in any previous year of its history. In the year ahead United States Steel expects to produce an even greater amount, that is, in the absence of hindering developments, such as strikes and work stoppages.

The steel operating rate of United States Steel for the whole of 1951 averaged approximately 101.5 per cent of rated capacity, and in recent weeks has averaged close to 105 per cent of capacity. Our shipments in 1951 will approximate 24,250,000 net tons of finished steel products. This is 7.1 per cent more than the 22,635,000 tons shipped in 1950, our best previous year, and 15.2 per cent above our record wartime shipments of 21,052,000 tons in 1944.

In order to provide more steel to help meet present and possible future national needs, United States Steel entered upon a post-Korean expansion campaign designed to add 4,300,000 net tons annually to its steel ingot producing capacity. Of this tonnage, 1,800,000 tons were added by the end of 1950, representing additions that could be made by United States Steel promptly at existing plant locations. 1951 found United States Steel midway in the completion of the remainder of its construction program. The remaining 2,500,000 tons of additional capacity will become available for the most part in 1952.

During 1951 United States Steel completed fifty years of existence. We are proud of our record of service to the nation during this past half century. During the years to come, United States Steel will continue, to the extent of its ability, to bend its efforts toward serving the best interests of the country.

EUGENE HOLMAN, President of Standard Oil Company (New Jersey) made these significant remarks before the American Petroleum Institute at a recent meeting in Chicago.

THIS IS A PERIOD WHICH is witnessing some of the most perplexing yet stirring developments in history. It is difficult for anyone to get historical perspective on his own time and to estimate its importance compared with others. It's a case, no doubt, of being too close to the trees to see the forest. But even making allowance for that, it must be apparent to everyone that we are living in an extraordinary period of social and scientific development. It is a privilege, I believe, to be alive in a period of such great happenings.

The world we live in is full of energy —not only oil and gas but coal, water power, atomic power, and, perhaps not too far in the future, solar power. A persistent drive of civilized men at all times and in all places, has been to find ways of tapping sources of energy, and applying that energy to supplement the muscle-power of themselves and their animals. Only by multiplying the energy at their command can men lessen the obstacles of time and space and improve their conditions of living.

In view of this truth there is virtually no limit, over the long term, to humanity's desire for energy. The questions are: how will this desire be filled, and in what forms will energy be supplied?

Since 1938, world consumption of energy from all sources has increased by about 40 per cent. This is partly due to increased world population. But it is due also to higher per capita use of energy in large areas. The outstanding example is provided in the United States, where for the past 30 years, the use of energy has been growing about twice as fast as the population. It is this increased per capita use of energy that has meant higher living standards for the individual.

A large part of the world's energy requirements, of course, is supplied by oil. Just before World War II, world oil consumption, exclusive of Russia, totalled around 5 million barrels per day. Eight years later, daily use had grown by some 2 million barrels. In the next four years use rose 3 million barrels more. Today world oil consumption amounts to over 11 million barrels daily, more than double what it was only twelve years ago. This means new refining, transportation, marketing and storage facilities sufficient to handle that new amount of oil. What oil demand will be in the future, I hesitate to predict. The oil business frequently astounds even those who know it well by its capacity to expand, both on the demand and the supply sides.

With respect to domestic demand in the period lying immediately ahead of us, one factor to be considered is simply the growth in the number of people living in the United States.

In addition, there has been a really remarkable increase in the nation's industrial capacity, and the living standard of the great bulk of Americans continues to rise. Now the defense program is adding, and probably will continue to add, the demands of the armed forces and of the industries producing for them to what may be regarded as the normal civilian increase in oil demand.

Finally, we must take into account that even if each year saw only the same percentage rise in demand, the absolute yearly increases would be progressively bigger because every percentage increment applies to a higher base. The effect is a compounding of the volumes of oil required. From all this, it seems clear that domestic demand will continue to climb. However, it may well be at a slower rate than in recent years.

Turning our eyes to countries outside the United States, we find that whereas the absolute volume of their oil consumption is lower than ours, the rate of increase is nearly double that which is taking place in this country. In part, of course, that steep rise in demand reflects the fact that reconstruction needs have been superimposed on more normal growth. In addition, the factors of population increases and of higher living standards play their part. Rather steep gains in foreign demand appear likely to continue for a while.

Putting all these factors together, it doesn't take a prophet to conclude that both we in America and our friends abroad are going to want lots of oil. We have to ask ourselves: "Where is the oil coming from?"

The great bulk of the oil that American consumers will use in the years ahead will undoubtedly come from domestic fields. Help in meeting the future oil needs of consumers will come also from increasing production outside the United States. Foreign oil is valuable also as a supplementary source of supply for our own use. A third means is available to supplement production from domestic and foreign wells. I am referring, of course, to the production of synthetic oil from coal and shale. We know how to do this right now.

This whole question of oil development abroad inevitably brings with it the need to consider the relations between governments and oil companies. The first requirement of our business, of all business, indeed of all human affairs, is that the world recognize and hold to a standard of international morality.

What does seem most clear to me from this vantage point in mid-century is that demands upon us have been fulfilled to date largely because of one characteristic in particular. The consumer has been served by a flexible industry.

In the future, flexibility is likely to be more important to us than ever before. The higher levels of demand in prospect can be handled smoothly only if the industry is ever ready for unforeseen problems suddenly presented. Then, too, inherent in the business are intangibles such as weather, which we cannot accurately forecast but which we must anticipate. There are other operating contingencies, common to most industries but of more critical significance, perhaps, in one like ours.

Considering the responsibilities now visible on our industry's horizons, we realize oilmen must continue to play an extremely important part in the constructive development of our world. The future is calling for leadership inspired by the kind of democratic principles which have shaped the oil industry.

By **E. R. BREECH**
Executive Vice-President,
Ford Motor Company

FOR FORD MOTOR COMPANY, 1951 has been a year of readjustment—a year in which changing conditions have dictated serious revisions in our thinking and major realignment in all our plans and programs.

By adapting our policies to fit the needs of the times and by deferring the achievement of some of our long-standing objectives, we have met the challenge of the twelve months now ending. We have tested and proven our ability to move ahead of the tide of turning events and to handle the problems peculiar to a period of unprecedented economic transition.

In the immediate future, and for some time to come, many benefits must accrue to Ford Motor Company as the consequence of our years of build-up and preparation. Our three completely new lines of Ford, Lincoln and Mercury cars for 1952 will place us in a highly advantageous competitive position. Despite these assets, however, it is obvious that we cannot hope to increase our share of the automotive market under the existing framework of material allocations and production restrictions.

Our production figures for the past two years show the effect of the NPA curbs. In 1950, Ford Motor Company produced 1,902,536 passenger cars and trucks. In 1951, according to the latest schedule, our production will total 1,482,631 units, and under present regulations, there is every indication that 1952 output will be 40 per cent or more below the 1950 level.

As war-born restrictions and shortages continued to tighten their grip on civilian production during the year, Ford's role in the national defense program grew increasingly important. We have made major strides in launching a number of major defense production jobs, including the manufacture and assembly of aircraft reciprocating and jet engines, tanks, ammunition parts and many other military products.

Pre-production work at our large aircraft engine plant in Chicago is well along, and actual production at this plant in 1952 promises to meet schedules. Construction of several other large defense plants which the company is building with its own funds, is making excellent progress.

The organization to man these plants, particularly the executive and technical forces, is well set.

In all of our defense operations, plant layout and tooling rates are provided greatly in excess of projected 1952 production rates. After production begins, should the international situation worsen and the demands for defense production increase, Ford Motor Company could step up its unit deliveries of military goods materially.

While there will be a gradual increase in employment as defense production is stepped-up, if there are further cuts in passenger car and truck production, and we are anticipating there will be, then overall employment may decrease in our company.

In 1952 there undoubtedly will be a continuation of the heavy demand which military production has placed on machine tool builders. But when this demand does subside, Ford Motor Company will pursue aggressively several programs which will require a continuation of our facilities expansion for civilian goods production.

We look forward with confidence to the not-too-distant future when increased capacity for steel, aluminum and other materials now in short supply will be sufficient for industry to return to more normally competitive conditions.

Assuming no further worsening of the international situation, and therefore no greater demands for military supplies, it is reasonable to expect that civilian goods will be produced in quantities large enough to make most of the present government controls unnecessary by some time in the first half of 1953. Elimination of these controls as far as the automobile industry is concerned will result, I firmly believe, in great benefits to the American consumer.

In abnormal times such as these, with restricted production and price controls, ceiling prices tend to become price floors. In effect, an umbrella is placed over the heads of the inefficient.

Not only the automobile industry, but all American industry grew strong under highly competitive conditions. We shall welcome a return to more competitive conditions.

By **GWILYM A. PRICE**
President, Westinghouse Electric Corporation

AS THE NATION'S INDUSTRY enters the new year of 1952, it is faced with the steadily mounting demands of defense production and a corresponding drop in the output of consumer goods.

This trend became increasingly apparent in the last six months of 1951 as orders for military equipment of all kinds began to rise in volume and restrictions on the use of critical materials were made tighter and tighter.

Despite these severe handicaps, however, production of consumer products during the past year at Westinghouse was down only 10 per cent from the record year of 1950. This was achieved mainly by the use of alternate materials, by design changes that required use of less critical items, and by reduction of scrap losses.

It is anticipated that even deeper cutbacks on civilian goods output will be called for during the first six months of 1952. But, barring the event of an all-out war, the situation should begin to show improvement by the Fall of the coming year, as supplies of materials such as copper, steel, and aluminum become more readily available or other alternate materials are developed.

In dollar volume, Westinghouse production last year was well above the record output of 1950. Apart from the substantial increase in military orders, considerable gains were made in sales to the utility, transportation, and steel-making facilities of the nation, which are also geared for an all-out effort.

In the belief that this growth will continue in the coming years and that additional facilities will be needed to meet defense requirements, Westinghouse during 1951 undertook the largest expansion program of its history. A total of $296,000,000 will be spent for the construction of new plants, for the enlargement of present facilities, and for the installation of new and improved equipment. The new program will increase productive capacity by 50 per cent, and is the second major expansion project undertaken by the company since the end of World War II.

The decision to embark on another great expansion program was inspired by the truly astounding growth in demand for Westinghouse products since

the end of World War II. In fact, the electrical industry has grown at a rate approximately three times faster than industry generally; and utility experts are confident that the demand for electricity will continue to move upward in the coming years.

The new facilities will provide for increased output in jet engines, aircraft armament systems, electronic tubes, generating equipment, small motors, household appliances, radio and television sets, electric torpedoes, radar apparatus, aircraft parts, welding equipment, transformers, and many other products. Wherever possible, plants designated for defense production now will be utilized for civilian goods output when conditions permit such a change.

This great productive effort of the nation's industry certainly should convince all that we are prepared to meet whatever demands the country's emergency places upon us. But at the same time it brings into still sharper focus two major problems that must be solved if progress is to continue at its present high rate. These are the problems of equitable price controls and sound Federal taxation policies.

Along with other manufacturers, Westinghouse is well aware of its corporate duty to produce to the limit those goods required by the military, and at the same time to fight inflation by keeping its prices at reasonable levels. But it fails to see how this can be achieved if costs for labor, materials, and services are not first controlled in the same measure as prices.

By ALFRED H. WILLIAMS
President, Federal Reserve Bank of Philadelphia

"BUSINESS WILL stay generally good in '52." That was the headline summary of a poll recently reported by one of the country's leading business newspapers. It is a presumption and a prediction. The presumption is that business has been generally good; the prediction is that business has the necessary staying power to continue good for another year. Yet, the business-club and pullman-car talk is tinged with pessimism.

Whether business was good last year depends, of course, upon what business you are in and what you mean by good.

The view through the telescopic lens with sights adjusted for one year ahead, as usual, is not all clear, and a microscopic lens is utterly useless for distance. The better of the two instruments seems to bring into view the very things we expected to meet last year but scarcely met, namely, shortages. Not shortages of money, but shortages of things for money to buy. Last year we talked a lot about defense, but we lived well. We did not let our fears interfere too much with our daily civilian needs. With reluctance we yielded, here and there, some materials for defense; we suffered, under protest, greater tax deductions, and bought some bonds.

This year will be different. The legislative and much of the planning stages of the defense program are now behind us; but the real work of making tanks, aircraft, electronic and related military equipment is right on our doorstep. Henceforth we may expect shortages to materialize. True, we have increased our productive capacity at a greater rate than ever before. Nevertheless, there will not be enough of everything for all purposes, and an aluminum ingot cannot serve both Mars and Minerva. Moreover, there are limits to our labor capacity. Production for defense is estimated to take nearly one-fifth of the national effort instead of a mere tenth as it did last year. By all known odds, we shall be busy.

Our busy-ness may be expected to permeate the entire economy. We may very well establish new records in amounts of things and services produced, in man hours of toil, in tonnage of coal and oil burned up to power the machinery and fire furnaces of industry, in dollars of spending power, and in dollars drafted for defense. There may be more murmuring about deeper-biting taxes, rising costs of living, ceiling prices, controlled materials, credit restrictions voluntary or involuntary, insufficient motor cars, readjustment of wage rates, and other discomforts of an expanding defense program encroaching upon civilian life.

By WILLIAM J. HOGAN
Vice President and Treasurer, American Airlines

IN REGARD TO THE GENERAL economic picture as we see it for 1952, we believe that it will be a year of good business, perhaps a little better than 1951. We expect a moderate increase in the volume of air line business and that our company will participate in that increase. We consider the problem of expense control as being very important during the year 1952 inasmuch as the expense trend has been upward and there has been a squeeze on profits.

By JAMES S. KNOWLSON
Board Chairman and President, Stewart-Warner Corporation

AMERICAN INDUSTRY'S PROSPECTS for 1952 are reminiscent of the farmer who fed a lot full of pigs all winter, then marketed them in the spring for exactly what they had cost him, plus the cost of their feed. When asked how he had fared on the deal he philosophically guessed that he had "come out ahead",—for after all, he'd had the company of the hogs during the winter at no cost to himself.

It seems quite obvious, glancing at present tax rates, that despite probable high rates of production we are going to have to derive more and more satisfaction from production accomplishment figures rather than from profit carried to surplus.

Stewart-Warner plants are entering the new year with rearmament orders almost twice what they were at the beginning of 1951. During the last half of 1951 the percentage of our total business which was defense business rose sharply. Of our total volume in 1951, special items for the government accounted for about 30 percent, as against approximately 10 percent in 1950.

Despite this geared-up output of rearmament business, such considerations as price re-determination, renegotiation and taxes have, as indicated in our nine-months statement ten weeks ago, very effectively prevented profit from following the same upward pattern as did volume. With all of these profit-limiting factors present in 1952, and with tax rates even higher than they were during most of 1951, it is apparent that most of us will have to rely more and more on "satisfaction" as compensation for effort.

At the risk of redundancy, I will predict more inflation, with all of the problems that inflation brings. If our government has any untried tricks to alleviate the problems of inflation, now is the time to trot them out. "Too late" may come too soon, unless the trend is headed.

Fitting in the Specialist Without Antagonizing the Line

By LT. COL. L. URWICK, O.B.E., M.C., M.A., etc.
Chairman and Managing Director
Urwick Orr & Partners, Ltd.
London, England

A good down-to-earth discussion about the difficulties and worries a specialist faces in treading the straight and narrow.

I FIRST READ Frederick Winslow Taylor's "Shop Management" in 1915—the year of his death. The place where I read it was the Company Command Post at Hooge at the tip of the Ypres Salient, at that time the nearest point to Berlin held by the Allied armies. It was described by Sir Phillip Gibbs, the war correspondent, as "one of the Empire's livelier schools of war for bright young officers." That reading determined my subsequent life's work, though at the time the prospects that I should have any subsequent life in which to work appeared dim.

LEGENDARY FIGURE

My subject this afternoon is the specialist. Please don't giggle. I am well aware of the character of the now legendary figure to which that title has become attached through one of the greatest feats of best-selling in the history of modern American literature. Indeed, if all who specialize shared that craftsman's amiable weakness for twin-seated equipment—surely the hall-mark of connubial amity!—there would be no problem for us to discuss. Always there would be a place in every shop for the specialist and the foreman or departmental manager to sit peacefully side by side and to complete their business with mutual satisfaction.

Unfortunately there is a tide in the affairs of men which, in this context, seems to be always at the ebb. And my object in writing this paper is to examine briefly why this is so and to suggest, if I can, means by which the specialist can avoid what often appears to be the inevitable friction and contretemps which so frequently accompany his introduction. The facts, indeed suggest that there is some fatal obstacle which insures, almost without exception, that the arrival of some new form of specialization in any business is the signal, as it were, for loud assertions of competence or less loud, but even more deadly, whispers of incompetence, both of which are unmistakable symptoms of bad personal relations or lowered morale in the whole or part of the executive team.

What is this obstacle, if it exists? Why do specialists suffer from a special form of disability to "get on with" existing "line" officials, or don't they? It is perhaps not pushing my analogy too far to suggest that they seldom, if ever, seem to have a natural taste for "two-seaters" or native skill in their construction. So that the two parties eye each other uneasily and then make a concerted rush for the same accommodation which ends in a collision on the doorstep—of some higher executive. If we admit an obstacle, it would not be inappropriate to describe my modest contribution as "Hints and Tips on Building Two-Seaters" or, to borrow the title of a much more famous contribution to management literature, "Handicrafts for the Handicapped".

Text of talk delivered November 15, 1951 before the Pittsburgh Chapter of S.A.M.

LABOR UNDER HANDICAP

For the specialist does labor under a handicap. Being a specialist he usually talks a jargon of his own. Ordinary folk are suspicious of him. There is the old crack about "the specialist who knows more and more about less and less till eventually he knows everything about nothing". The late Sir Arthur Quiller-Couch has put the same thought in more literary form:

> "Against knowledge I have, as the light cynic observed of a certain lady's past, only one complaint, that there is so much of it. If you crave for knowledge, the banquet of knowledge grows and groans on the board till the finer appetite sickens. If, still placing all your trust in knowledge, you try to dodge the difficulty by specializing you produce a brain bulging out inordinately on one side and, on the other cut down flat and mostly paralytic at that. And, in short, I hold that so long as the Creator has an idea of a man, no uneven specialist realizes it."

SUSPICION NOTHING NEW

Nor is this suspicion of the specialist anything new. Almost exactly a century ago, a brilliant woman, Florence Nightingale, suggested that the function of military nursing which had previously been performed by untrained male orderlies under the command of the Army Medical Corps should be specialized and — horror piled on horror! — that it should be entrusted to women. Today that seems an ordinary idea enough which everyone accepts as a matter of course. But, at the time, the leaders of the Army Medical Corps were loud in their contempt for such a fantastic notion and, when it appeared that there were fools and traitors in London who

were prepared to take it seriously, savage in their denunciation. As the small boy said of his parents, when a fancy for a pickaninny had tempted him to experiment on his baby sister with the blacking brush, "I wouldn't lower myself to repeat their unkind language."

Lytton Strachey has a brilliant description of one incident. Thousands of men in the hospitals at Scutari were dying of cold. A consignment of warm shirts arrived from England. The Purveyor, who controlled issues, said that it was impossible to unpack the shirts till a Board of Audit had passed the consignment. A Board of Audit which must include a General Officer would take three weeks to assemble. Florence Nightingale who could always do what she liked with the rank and file, called up a Corporal's guard and opened the bales forcibly with a hatchet while the Purveyor stood by "wringing his hands in departmental agony."

What is the reason for this age-old suspicion of new forms of specialization? One reason is the fact that the specialization is new. Man is a creature of habit; he is hag-ridden by custom and established patterns of behavior. Novelty of procedure, probably even still more novelty of ideas, are always suspect. That is why I have put the onus of proof, as it were, the main responsibility for avoiding trouble, on the specialist and not on the "line" man. In all forms of human society, not only in business, the newcomer has to "pay his footing"; initiation rites can be extremely painful. So, when in any business organization some subject—personnel work or time-study or planning or what you will—which has previously been part of the responsibility of the "line" supervisors is taken out of their hands and specialized they are very apt to be "cagey" and suspicious about the new departure.

DIFFERENT CREATURE

The "specialist" too is apt to be rather a different kind of creature not easily understood by his "line" colleagues. All through the last half of the nineteenth century, much of the work of the skilled engineering craftsman on the shop floor was being gradually taken away from him and concentrated in drawing offices and research laboratories. His workmanlike judgment and discretion were progressively restricted. He had to do his part of the job to more and more detailed drawings, to finer and finer tolerances, to more and more exact instructions. He did not like it one little bit and he said so on occasions with a pungency which seemed unnecessary to those who worked on tasks which enabled them to keep their hands clean.

But on the whole his craftsmanlike good sense approved the greater accuracy of the new methods. His foreman, a craftsman like himself, was satisfied and he could explain the changes as they took place so that they "made sense" to the worker. There was very little trouble under that head of which the echo has come down to us. On the other hand, when Taylor started to study the actual processes and methods of working on the machines under laboratory conditions, when he and his imitators tried to introduce "the one best way" of doing actual operations into the shops, there was a flaming row which has been going on more or less ever since. Organized labor bitterly resented the ideas of Scientific Management.

LABOR'S RECEPTION

This difference in the temperature of the reception given by labor to what were in fact, two halves of the same inevitable progression—one of its strongest critics observed that "Scientific Management is inherently in line with the march of events"—has often puzzled observers. It can be explained logically on the "one last straw" basis; the workers felt that despite the detailed drawings, they still had their skill; scientific management seemed to be taking that last refuge away from them, to be transferring even their skill into the hands of management. But the reaction of the men on the shop-floor was not of a logical character; it was non-logical and often highly emotional. And it is always dangerous to try to explain the non-logical sentiments of one social group by logical concepts which happen to make sense to another social group.

The one practical difference in the two situations was that the men who staffed the drawing-offices and research labora-

HIGHLIGHTS ON URWICK

Col. Urwick, who is an International Management Administrator, has been a member of S.A.M. for over 30 years and was Secretary General of the International Committee for Scientific Management from 1932-1935. He was instrumental in the London Congress in 1935 and was awarded for outstanding achievement in the field of international management, the C.I.O.S. Gold Medal this summer at the Ninth International Management Conference which was held in Brussels. Col. Urwick has been active as a consultant for many years, is a charter member of the British Institute of Management and was Vice Chairman of Council of B.I.M. in 1947. He is a well-known author of many management books and articles and a well-known lecturer on management subjects.

tories did not come down onto the shop floor very much. And when they came, they came as visitors, not as residents. Thus, while the engineering craftsman was aware that they were a strange breed —bright young men who had been at universities and who spoke a different language, who were apt to be at The Drama League or a musical when he was at a ball game—they did not obtrude too much on his social living. They left the pattern undisturbed. He only met them through his foreman who was usually, and quite justly, satisfied with his own ability to deal with any eccentricities they might attempt.

COMES THE INVASION

But with the coming of time-study and methods engineering the bright young men began to invade the shop-floor. And they pitched their tents. Offices began to spring up in odd corners where the worker had been accustomed to withdraw for a tolerated, if illegitimate, smoke. It looked to him as if they were becoming, as they were, a permanent part of the community of the shop-floor. And that did disturb him because it altered the social pattern. It is one thing to entertain a foreigner as an occasional visitor and quite another to make him a member of one's family. Moreover, the foremen, the men who were there to give the worker a lead, were just as worried by this new development as he was, though for a different reason. The bright young men had the support of their bosses and often the foreman found himself in trouble because he was not as quickly receptive to what seemed to him their crazy ideas as the bosses thought he should be. He was less certain of his authority than he had been. He felt that he was no longer master in his own house. He was not in the mood to explain these new changes so that they "made sense" to the men.

This last point is probably the most important of all in the analysis of the difficulties which face the new kind of specialist. If he is a *new* kind of specialist he is by definition going to do a job of work which was formerly done, however badly, by the "line" executive as part of his overall task of supervision. Moreover, the responsibility of the specialist, again by definition, is not for a particular process or group of machines, something which can be delimited physically even if it is only by a white line on the floor of the shop. It is for a particular subject, a kind of work, something which can only be delimited by a verbal definition; and words are a very inexact and imprecise instrument of communication. They leave all kinds of loopholes for "interpretation". If they did not there would be no work to occupy the time of the legal profession.

This fact hits the "line" executive in a number of different places. He asks himself why the hell the specialist should know more than he does about a job he's been doing for half a lifetime? And when he gets through that one and is prepared to admit that the man who specializes on one bit of his whole task may be better at that one bit than he is, he begins to worry about "his authority" over "his" men. And even when he has that one settled to his satisfaction and the authority and responsibility have been defined in terms which seem to him reasonable, a new and ambitious young man turns up in the specialist job and he finds that the definition can mean very different things to different people.

Now "his authority" over "his" men, his responsibility for results, is the only ground that the "line" executive has to stand on. The specialist may have, often must have, a professional qualification. He has a "ticket" which will earn him his living anywhere. But the departmental manager or foreman has only his personal record, which is almost exclusively a question of his ability to deliver the goods, to get results. Nine tenths of the difficulty in introducing new kinds of specialists is just plain fear. The "line" men are afraid of something which everyone is afraid of when it comes down to cases, that they are going to be asked to manage a particular area of activity, be held responsible, that is accountable for getting results within that area, without having the necessary authority. There is nothing more uncomfortable than being held accountable for anything when you haven't the authority to control all the factors in the situation.

TWO POINTS

If the specialist can learn to overcome two things:

1. The feeling that he is new and strange,
2. The suspicion that he is going to take away some of the "line" man's necessary authority over "his" men,

we can eliminate an enormous amount of friction and misunderstanding in plants all over the world.

To deal with the second point first, if trouble for this reason is to be avoided the difference between specialized authority and direct authority must be more clearly recognized. The difficulty cannot be dodged by describing the specialist's authority as "purely advisory". This phrase is a nonsense, a classic in wishful thinking. It was invented to mollify infuriated "line" managers, like nurses make clucking noises at babies. Chief Executives do not appoint, and Boards of Directors do not allow them to appoint expensive specialists in order that "line" managers may please themselves as to whether they listen to them or not. They are appointed, or should be appointed, as the result of a definite development of corporation policy. That new policy is both their charter and their authority. They are there in order that the whole undertaking may have the benefit of their specialized knowledge whenever and wherever matters arise within the field in which they are specially knowledgeable.

On the other hand it is clear that they must not interfere with their "line" colleagues' *direct* authority over "their" subordinates. The chain of command must be left intact. No man should be asked "to serve two masters".

INDIRECT AUTHORITY

The logic of that situation is sufficiently obvious. The specialist must recognize that his authority over anyone who is a "line" subordinate to any other executive is *indirect*. Officially speaking, it must only be exercised *through* that "line" superior, that is with his approval and agreement. This does not mean, however, that all action must climb wearily up one chain of command, across the top and down the other chain. Once a specialist has won the confidence of a "line" executive that he understands and recognizes that executive's "line" authority over his subordinates and has no idea or intention of infringing it, he can do 90% of his work direct, provided he is meticulous in observing two precautions:

a. He should *always* have the com-

mon courtesy to inform a "line" executive of any action he has taken affecting any of that executive's subordinates.

b. If there is the least chance of dispute or disagreement about any action, he should go *through* the "line" superior first, either personally or officially.

On the second point it should be noted that dispute can start, and usually does start, from the subordinate. A "line" executive may be wholly reasonable and genuinely anxious to live at peace with his specialist brethren. But if a subordinate comes to him with a sad, possibly a garbled, story about what that adjectival planning clerk or personnel assistant has told him to do, the "line" executive has to be something more than human if he is not sometimes to "fly off the handle". As the late C. E. Montague remarked shortly after the close of World War I, "There may be laid up in heaven a pattern of staff which are beloved by the man in the line, but such love is not in the nature of man."

TRY TRUSTING

It may be thought that this careful observance of "the official channels" must necessarily slow down business. But this conclusion really rests on a misunderstanding of what "the official channels", paper work, are for. They are "for the record", a safeguard in case personal relations break down, *not*, repeat *not*, a primary means of getting work done. All the real work of the world in good organizations is done by men who trust each other. They agree decisions on the telephone, using first names and get on with it, merely telling their secretaries "to file the confirmation when it comes through". If there is the least chance of misunderstanding or disagreement they try to meet each other face to face; if you can't see the other fellow's eyes, you can't really tell "what's biting him".

Of course you must have the confirmation, the record. Because officers change, human relations do sometimes go wrong, men forget, sometimes when a decision has had an unfortunate result they 'forget' their part in it. "Official channels" are as necessary in large organizations as are drains in a house; and they fulfill exactly the same function as drains—they get rid of the waste matter. But the people who try to use them as a primary method of getting work done are not executives; they are bureaucrats. They are in fact citizens who, referring to the last speaker, "have a pathosis" for living in their drains.

But when he is new, when his colleagues don't yet know him well personally and are unaccustomed to the idea of specializing his particular function, the specialist should fall over backwards to observe the protocol, to stick precisely to the official channels. Because his first job is to convince them, beyond the peradventure of a doubt, that he does recognize and accept their direct, their "line" authority over their own subordinates. Until they feel that, as a matter of course which they don't have to think about, they are bound to be suspicious and watchful of his every step.

That leads back into the first point—the newness of the specialist and man's instinctive distrust of what is novel. That is more difficult because it is not entirely under the specialist's control. Higher management too often appoints new specialists in a fit of enthusiasm, perhaps without having worked out the policy and the organizational arrangements which the policy demands or having taken the trouble to "sell" them to those concerned. It then tells some equally enthusiastic new specialist that it expects quick results from his appointment.

There can be no more fatal requirement. Because the one thing which is essential if human beings are to accustom themselves to new ideas is *time*. It is one of the paradoxes of the history of management that, despite the bitter attacks made by organized labor on the very idea of Scientific Management, there never was a strike in any plant in which F. W. Taylor was operating personally. That was due to his sensitive appreciation of the importance of the time factor. When he became the first management consultant, he refused to operate for any client who would not take a three years' view of the project. He always emphasized the importance of not attempting to alter the conditions of a single worker until *everything* that could be done to make management conditions effective has been seen to. Even then he would not apply the new methods to more than *one* worker at the beginning. He always demanded opportunity for time to work, for the force of example, of something they could see, to convince the workers; he knew that argument was futile. He said repeatedly that in introducing Scientific Management convincing the workers was comparatively easy if the job was tackled in the right way.

In the context of this argument three years is an excessive period for the introduction of a new specialist. But *some time* to allow his "line" colleagues to get used to him is essential. Broadly speaking, no new specialist should ever be asked to get or try to get positive results for *at least six months* after he has been appointed. He should be encouraged to devote that six months to getting to know his "line" colleagues personally, persuading them to talk and *listening*. In making these contacts he should have two purposes:

1. To use the opportunity to convince every "line" manager and supervisor in the place that he recognizes and accepts their direct authority over their own subordinates and that he would never dream of trying to cut across it.
2. To try to discover some point which is worrying his "line" colleagues, something which is a headache to them, which he can use his new specialized and central position to clear up. The man who can start something new by being helpful in a practical way is already far along the road to being accepted as a member of the family.

Six months may seem a long time to many executives during which they should employ an expensive specialist without looking for results. But few businesses think anything of devoting two or more years to developing a new model or a fresh product. A new model of organization which challenges the patterns of behavior, the social structure, of any human society—and a business is after all a society — cannot be introduced overnight. If attempts are made to do so they must almost inevitably end, as do attempts to rush out new patterns or products, in frustration, disappointment and excess cost.

Let the new specialist *start* by making himself and his specialization acceptable to those on whose collaboration its utility to the undertaking must depend and all things else will be added unto him.

How to Plan A Program For Economic Education

By JOHN F. MEE

Professor and Chairman, Department of Management
Indiana University

CONSIDERABLE interest has developed during the past five years in the subject of Economic Education for supervisory and operative employees in American industry. In answer to many requests for information on Economic Education, the Foremanship Foundation has undertaken a comprehensive study of the representative plans and programs presently in use. The results of the study which was made by Dillard E. Bird, Educational Consultant to the Foundation, have just been released in the Foundation's Management Development Series under the title of "Survey of Economic Education."

To assist any company officer, executive, personnel or industrial relations director or training director in formulating and developing a plan for an Economic Education Program or for evaluating an existing one, pertinent and concise information is presented. The programs of two hundred companies were studied as being representative of the field and a compilation of the best current practices and subject matter has been assembled. The results of the program are presented in the following organizational form:

Under the section entitled *Package Programs* there is outlined all those which have been developed by foundations, colleges, and commercial organizations. These are programs which the designers and distributors believe can be used with good effect by business organizations generally. Typical titles are as follows: Job Economics Training, Visual Economics Program, Productivity and Plenty, American Economic System, and What Every Man Should Know About Business and the Republic Steel Program.

Typical objectives of the package programs are to develop a better understanding of the workings of the American economic system and to improve attitudes based on popular misconceptions or mistaken economic beliefs. Each program is analyzed as to its content, the approach to the subject matter, the type of audience most suited for the material, meeting schedules, qualifications for the leader, methods and media used to present the material, cost of the program, and an evaluation of its effectiveness.

Under the section entitled *Program Types* there are described programs which are being used with good effects in business and industry but which are not related to any individual companies. Each includes one or more features which distinguish it from all others presented. Inasmuch as many companies have economic education for their foremen and supervisors in a very broad way, these do not deal with economic education in the strict sense. A description is given of supervisory programs which include subject matter on topics such as: How We Live, What Is Best for Me and My Family, General Policy and Labor Relations, Institute of Business, Case History in Management, Bird's Eye View of Economics, and Ria Associate Membership Program.

Non-supervisory programs are described for hourly employees and members of the community. Such programs are based on the assumption that a program to be effective must extend to those people with whom the supervisors work and with whom he spends most of his time off the job. Such programs include information on Attitude Surveys and surveys of economic thinking, Employee Forums, The Company and its Business, Employee Orientation Meetings, Annual Report Meetings, and Union Officials sent to Freedom Forum.

Communications programs are presented because of the general feeling expressed by a number of leading firms about economic education and its relationship to the basic problem of effective communications at all levels. Examples of communications used are information racks, letters to employees, leaflets distributed with pay checks, comic books developed and distributed to employees, suggestion systems, economic articles on house organs and special bulletins, posters on free enterprises, open house and plant visitations, speakers bureau for community service, and movie libraries.

In the section on *Analysis and Conclusions*, the plans reported in this study are representative of all those currently operative in industry today. There is a wide variance in the specific plans. No two plans or programs are exactly alike and yet there is a common bond among them; namely, their objectives. A summary of the objectives of all of them may be obtained from the following list:

1. To increase employees' knowledge and understanding of basic Economics.
2. To increase employees' knowledge and understanding of the American Economic System.
3. To stimulate sound thinking and attitudes in employees about the spirit and workings of our System.
4. To increase knowledge and understanding of, and confidence in, the company by employees and the community.
5. To encourage desirable changes in attitudes and opinions and their expression in actions on and off the job.
6. To create better management-employee relations.
7. To increase recognition of the value of liberties and an awareness of responsibilities they imply.
8. To reinforce management's position in the Economic sense.
9. To create a civic and political consciousness.
10. To prevent the rise of Socialism in this Country.

The presentation of this study provides a concise Handbook on Economic Education. It is the best and most complete summarization of existing material on the subject to date.

A New Supervisory Training Program for Public Employees

By ALLEN S. HUBBARD, JR.
Chairman, New York State Personnel Relations Board

A picture of New York State's well rounded personnel program, to promote better relationships between the State and its employees.

THAT MAN CANNOT live by bread alone is a concept shared by personnel administrators as well as theologians. Studies in the field have indicated that the pay check is frequently of secondary consideration to the employee. Major factors which affect the employee's performance and enjoyment of his position are a feeling of security, a sense of importance to the organization, appreciation of and notice by the supervisor of the work performed by the employee, and a sense of job satisfaction.

RECOGNIZED NEED

Although public administrators in New York State have felt for years that in terms of salaries, working conditions and employee benefits the State was among the leaders, they have recognized a need for a supervisory training program which would instruct supervisors in the human approach to administration, and acquaint them with some concepts with which they might not be familiar, or which they may have forgotten.

The Personnel Relations Board had been established by Governor Thomas E. Dewey in February 1950, in the State Department of Civil Service, as a part of the State's well rounded personnel program, to promote better relationships between the State and its employees. The Board was the logical organization to perform this function, since the Governor had directed it not only to set up machinery for the processing of complaints and to act as a final hearing board, but also to use its facilities to reduce the areas for employee complaints.

After careful consideration, the Personnel Relations Board evolved a specially designed human relations program which was to be given under its auspices, and through the facilities of the Training Division of the Department of Civil Service.

Most supervisory training in the past had been oriented towards efficiency and human engineering with human relations as a secondary objective. The Board believes that although these items are of major importance to any organization, more emphasis should be placed on those factors affecting the relationships between supervisors and employees in accordance with psychological and sociological findings and plain common sense. This program, if successful, might not contribute directly to more efficiency or greater output, but should affect these factors in terms of better morale, lower employee turnover, and the attraction of well-qualified individuals to careers in New York State service. The main idea of the course was to emphasize to the supervisor the role of the individual in the organization in order that he might deal with his subordinates as persons rather than instruments of labor.

GROUP DIFFERENCES

The first program was given at one of the State divisions which was practically an autonomous unit. Anyone in this organization who had any supervisory responsibility, however slight, was chosen to attend with the result that the membership of the group ran the gamut from individuals with little training through persons with graduate and post graduate studies; and from someone who occasionally supervised one or two workers to one who constantly directed the activities of a large number. In order to prepare the group for the program and to establish rapport, one of the members of the Training Division arrived several days beforehand. He circulated among the employees to discover their needs in relation to the program and to disseminate some information regarding it.

THE PROGRAM

The actual program was designed for a hundred and thirty-five persons, who were divided into groups of twenty-two to thirty-seven, for the four two-hour sessions. One hundred and forty-four actually took the course. The sessions were given at weekly intervals, so that each individual who attended spent two hours a week for four weeks in the program. The sessions were operated in a modified conference style in which the leader, by adroit direction and the judicious use of questions, had the group bring out the problems and possible solutions as they saw them, which were the basis for the discussion within the framework of the program.

The first session, which covered two hours, was devoted to the subject, "The Supervisor as a Leader," and covered the following topics: Definition of supervision, basic principles of organization, supervisory leadership and responsibility, supervisory improvement, and essential factors for successful supervision.

Session two had as its subject "Human Relations" and encompassed the relationship of basic needs of the worker to his job, social skills, basic principles and the attitude of the worker.

The last two sessions were concerned with the handling of employee problems at which time the discussions were centered around the basis of attitudes, grouping of supervisory problems, ways of ascertaining the problem, do's and don't's of supervision, and the complaint procedure as set up by the Personnel Relations Board.

QUESTIONNAIRE

At the last session, a questionnaire was distributed among the students in order to judge their reaction towards the program, and to get suggestions for revising it in order to make it more effective. The answers to the questionnaire indicated that on the whole the program was well received. For example, 123 out of 144 felt that the program was practical, 126 felt that the topics were well chosen, and 132 indicated that the program was of definite benefit or helpful.

Some of the employees' written comments on the questionnaires in response to the question "What specific benefits did you get from this program?" were:

"A better understanding of how to get on with employees and understand their side of the story."

"I can get at the bottom of some of my problems in a more understanding way."

"Patience and tolerance should be our prevailing points."

"Insight relative to the problems of employees."

The question, "Do you feel that your participation in this program has helped you to understand more fully the responsibilities of your job as a supervisor?" brought out the following answers:

"Having other ideas than my own helps give an insight into other people's problems."

"Gives you a greater feeling of responsibility in your job."

"Better understand what is expected of me."

When asked, "What did you expect to get but did not get from this program?", one employee replied, "Got more than I expected to."

CONCLUSIONS

On the basis of the program which was given, the Training Division arrived at the following opinions and conclusions:

1. A need exists for this type of program, it is favorably received, and in itself constitutes a morale factor by indicating that an interest is being taken in employee welfare.

2. For greatest effect, the individual group should be limited to as small a number as possible, in order that the conference method may be used to the best advantage.

3. Various levels of supervision should not be mixed indiscriminately in the separate groups, inasmuch as the presence of top supervision may inhibit free expression of ideas by subordinates.

4. The use of films as a follow up in the training program would be well received by the trainees, and probably prove very effective in reinforcing ideas offered by the course.

5. The program should be revised from one session of human relations and two of handling employee grievances to two of the former and one of the latter, since the Board is more interested in the approach of the supervisors towards the employees, than the techniques by which they deal with them.

6. The program must be flexible in order to adapt itself to the department or unit where it is to be given. A program given to a technical section, such as the professional staff of a hospital would necessarily vary in content and approach from that given to a road maintenance division.

On the strength of the program as it has been given, the Board feels that programs of this nature serve a definite end, and aid the Board in accomplishing its mission. Reducing the area of grievance before it arises is more valuable than the most efficient complaint machinery, since even the solving of a complaint to the satisfaction of the worker and supervisor may leave in its wake certain tensions; and since most complaints must be settled to the advantage of one party over the other, these tensions may be the basis for future complaints.

COMPLETE ADOPTION

The Board plans to continue the program, both in other sections of State government and in further sessions, on an annual or bi-annual basis, where the sessions have been given before, modifying each program to suit the group receiving it.

MANAGEMENT BOOKS *Recently Received*

Please order books directly from publishers.

Harvey Firestone, Free Man of Enterprise, by ALFRED LIEF, published by McGraw-Hill Book Company, Inc., 330 West 42nd St., New York 18, N.Y. 324 pages, $3.00.

Practical Business Psychology, by DONALD A. LAIRD and ELEANOR C. LAIRD, published by The Gregg Publishing Co., Business Education Division, McGraw-Hill Book Co., 330 West 42nd St., New York 18, N.Y. 551 pages, $6.00.

Productivity, Supervision and Morale Among Railroad Workers, by DANIEL KATZ, NATHAN MACCOBY, GERALD GURIN and LUCRETIA G. FLOOR, published by Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, Michigan. 61 pages.

Sharing A Business by FRANKLIN J. LUNDING, published by The Updegraff Press, Ltd., Scarsdale, New York. 150 pages, $2.75.

Psychology in The Service of The School, by M. F. CLEUGH, published by the Philosophical Library, Inc., 15 East 40th St., New York 16, N.Y. 183 pages, $3.75.

Humanistic Ethics, by GARDNER WILLIAMS published by the Philosophical Library, Inc., 15 East 40th St., New York 16, N.Y. 223 pages, $3.75.

Human Relations in Administration, by ROBERT DUBIN, published by Prentice-Hall, Inc., 70 Fifth Avenue, New York 11, N.Y. 573 pages, $7.35.

Writing the Annual Report

By NORMAN BRUCE SIGBAND
Chairman, Department of English,
De Paul University, College of Commerce
and Consultant in Business Writing

Annual reports should provide interesting reading and understandability—with an ease of analysis and interpretation.

GOBBLEDEGOOK — American Business Style

"Thus, for the year 1950 this corporation has made progress, to some extent that is, in its fields of manufacturing by introducing a system of internal control that is resulting in a definite saving in overhead expenditures that have not yet been reflected in declared dividends for the stockholders, but will, at the discretion of the company directors, be announced in the not too distant future."

UNFORTUNATELY, this is an excerpt from an annual report, but peculiarly enough, it isn't an isolated example of communication in annual reports, but in many instances, quite representative of the type of writing frequently found.

Obviously, a paper directed to stockholders should be written so that it not only provides interesting reading and is understandable, but also that it be easy to analyze and interpret. These four points should be kept in mind in writing a *readable* annual report. And just as significant is the *level* of the report's contents. The document should not appear to be a simple product of the public relations office, but an intelligent presentation of company activities.

These two major factors, readability and level of the report, will be considered in this paper. First, then, we will examine each of the four points under "readability" and then weigh the presentation level of the content.

IS THE REPORT INTERESTING?

To achieve interest in writing is a most difficult art at best. However, there are a few factors in reference to the report that will aid if they are kept in mind while writing. The report, when finished, should be tested for unity and coherence. The former is of course, the presentation and amplification of your topic with no irrelevant digressions. And coherence is not only the clarity of expression, but the logical and careful interconnection of all points. Another factor that will keep your reader's interest high is *his* place in the report.

This attribute may properly be labeled "the *you* attitude"; the same factor which causes so much discussion in business correspondence. But it is just as important in the annual report. It is true that the stockholder is interested in the company, but he is even more interested in himself and *his* company. And making him feel that it is *his* organization involves no more than talking about "his company" instead of "the company." Compare the two following examples:

"The Excello Corporation is pleased to report to its governing board that production for 1950 was 5% over the previous year."

"As one of the family of Excello stockholders, you will be pleased to learn that your company's production for 1950 was 5% over that of the previous year."

Certainly you should write from the stockholder's point of view, not only because of the important psychological factor involved but also because the company *is* the stockholder's.

Another factor that will aid in keeping the interest level high, involves the layout of graphs, pictures, and text; the colors used, the paper and the cover design. Care should be exercised, however, to keep the report from appearing ostentatious and costly. There is a natural animosity displayed by the stockholder when he feels that company funds are carelessly expended in distributing hundreds of thousands of unnecessarily costly reports!

IS THE REPORT UNDERSTANDABLE?

Is it possible that people who write reports express themselves in language too complex for common understandability? It hardly seems credible, for certainly the author isn't dealing with a highly technical and abstruse topic. Nevertheless, the stockholder-reader often says the report is "dull" or "hard to read." And he is quite correct.

A recent investigation on the "readability" of annual reports disclosed some very interesting facts. By using Randolph Flesch's (author of *The Art of Readable Writing*) readability formulas, the investigators found that in 26 annual reports, the level of reading understandability ranged from *fairly difficult* to *very difficult*. The same reports used words which were beyond the fluent comprehension and language experience of 75% of the U. S. adult population.*

Not only does poor word choice make many reports difficult to understand, but involved sentences and a lack of clarity in expression also help.

The solution to this problem is simple. It involves no more than making a careful choice of words, avoiding complex sentence structure, and writing with clarity.

IS THE REPORT EASY TO ANALYZE?

A third important attribute of the successful report is its adaptability to easy analysis by the stockholder. By the use of the term "easy analysis" it is not meant that simple diagrams, pictograms and very generalized financial statements should be exclusively employed. On the contrary, many annual reports use such eye-appealing devices to deter accurate analysis rather than promote it. Two or three circle charts can be made to say almost anything the writer may desire and the same may be said of many pictograms.

Charts play an important role in annual report presentation, and when they are used, they should conform to accepted statistical usage. They should certainly not be employed to present a biased set of circumstances. Standard bar graphs, line charts, and complete tables are only a few of the statistical graphical aids which may be utilized.

Analysis may be further aided by presentation of complete data (insofar as space and discretion permit) on all aspects of the corporation. There is no excuse for omitting data simply because they do not reflect the activities of the company in its most favorable light. Such an action can find nothing to commend it and is hardly ethical.

Analysis of the material may also be aided materially, of course, by attention to our second point above: understandability. For how can one analyze easily if one encounters difficulty in understanding?

IS THE REPORT EASY TO INTERPRET?

Our last or fourth point under readability is interpretation. This stems quite naturally from analysis for it would be difficult if not impossible to analyze without interpreting. However, the data presented must fulfill certain conditions for complete and accurate interpretation.

The annual report should present important statistical facts so that they may be compared with relative situations in the same company or similar companies. Also necessary in accurate interpretation is the display of similar data for previous years in the same company, with quantitative or qualitative statistics for the current year. Not to indicate a decline in production or profits by omitting necessary and comparable information of previous periods, is unfair. However, it is heartening to note that a great many recent reports present data on earnings, production, net worth, for every year since the founding of the company. This information surely serves as one of the most accurate mirrors of the company's progress for the stockholder.

PRESENTATION OF CONTENT

Up to this point we have considered what may be termed the "readability" of the annual report. Now, however, let us examine a factor of at least equal importance: the content of the report.

By "content" the writer does not mean to enter into a discussion of the individual sections of a report and which should be included and which excluded. That discussion may well wait for a later date. However, what is of primary importance, is an examination of the common practice of presenting the content of the report in a public relations style.

Too many writers of annual reports have a gravely inaccurate conception of the intelligence of the stockholder. The former often feels that he should concentrate on more attractive photographs, easily interpreted pie charts, and brief explanations, and definitely not worry the stockholders with any discussion of problems or complex events inside or outside the company. The result of such an effort is of course, a picture book; and elaborate circular; — in short, a public relations pamphlet. Everyone daily receives a basket full of similar "blurb" material, and how many people read any of it? Why then should the annual report be examined simply because it is dressed up in fancy covers, printed in six colors and filled with pretty pictures? No of course not; it's just another circular; another public relations release.

It is high time the writers of annual reports recognized the fact that the stockholder is an intelligent and critical individual who is undoubtedly above average in intelligence and deeply interested in world affairs.

The annual report then, should not contain simple statements concerning the decline or rise in production or employment without further explanation; or ignore completely labor relations' problems. Definitely not. All news, good and/or bad, is the result of outside forces. Whether those forces acting on the corporation be social, cultural, economic, or political, on a national or international basis, they should be explained.

It is true the stockholder *is* interested in dividends, but not dividends alone. He not only expects your explanation of company activities, but he is entitled to it and will certainly understand it. All you need do is present it at an intelligent level with adequate reference to today's affairs. How has the new government mobilization program affected company production, what effect will the call of defense jobs and the armed forces have on the available labor supply, how does the national economy influence company finances, do sociological and cultural changes enter into the firm's planning and what alterations in the organization's over-all make-up will take place because of international affairs? What about that two months' strike last year; how did it arise, how was it settled, what was its effect on company production?

It is said that nothing operates in a vacuum, and that is surely true of an American corporation. The stockholder today is well aware that all these mentioned forces are acting and reacting on individuals and groups. He specifically wants to know how those forces affect his company. The writer of the annual report is obligated to tell him, and he should fulfill his obligation to the stockholder.

And so in recapitulation, we may note that the annual report writer must make his report a readable as well as a truly significant document. To accomplish the former, he should write interestingly and insure the understandability of the report. And as a further aid to readability, he must be sure that the document can be easily and accurately analyzed and interpreted. As for our second major qualification, writing a significant document, he may accomplish that by utilizing the simple criterion of asking, "What would I expect? Sweet phrases, a cheery note from the board president, attractive pictures, or would I prefer an intelligent evaluation of the company in the light of world affairs."

The answer is simple — and so too should be the writing of a highly commendable report.

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*S. Pashalian and W. J. E. Crissy, "How Readable are Corporate Annual Reports," *Journal of Applied Psychology*, August 1950.

THE MANAGEMENT BOOKSHELF

The following is a letter written by Dr. Ralph C. Davis, Professor of Business Organization, The Ohio State University, author of the recently published book "Fundamentals of Top Management".

A review by Harold E. Smiddy, Vice President, Management Research & Development, Society for Advancement of Management, Inc., of this book appeared in the pages of the December issue of ADVANCED MANAGEMENT. Dr. Davis' letter is written in response to this review.

THE EDITOR, ADVANCED MANAGEMENT
Society for Advancement of
Management, Inc.

Dear Sir,

A review of my book on "The Fundamentals of Top Management" appeared recently in "Advanced Management". It is an excellent job by Harold Smiddy. I am very grateful for it. He raises one or two questions concerning the book, nevertheless, that are fundamental. It will be appreciated if I am permitted to reply to them.

The reviewer charges that the book preaches secularism. The charge is based on various statements in the book. They are to the effect that the right of private property is received by delegation from the body politic through the instrumentality of governmental organization; that authority in business organization, both executive and operative, is an extension of owner's rights of private property. The reviewer points out, very properly, that government receives its powers by delegation from the individual; that it derives its just powers from the consent of the governed. This author believes that any discussion of management philosophy is and should be secular; that it can not preach secularism, nevertheless. He does not concur, obviously, in the reviewer's charge.

It may be helpful to set up a few definitions. Reference to any good dictionary will show that the term "secularism" has a number of meanings. It may refer to a system of political or social philosophy which rejects all forms of religious faith and worship. It may represent the view that public education and other matters of civil policy should be conducted without the introduction of the religious element. The doctrine of the separation of Church and State represents a majority viewpoint in the United States. Dean Manion has pointed out in his book on "The Key to Peace", nevertheless, that the "official conjunction of the laws of God with the constitutions and laws of the land is the basic and controlling ingredient of Americanism". Secularism has never been a basis of public policy. A philosophy of management must be in harmony with public policy to be acceptable and effective. The author noted the force and effect of moral principles in management in connection with discussions of business objectives, business ethics and elsewhere. He believes that he discussed adequately the importance of such principles in the formulation of business policy. It was not his purpose, of course, to write a book on moral philosophy.

It is evident that the charge of secularism has a religious basis. The right of private property can be validated on this basis. The reasoning may be summarized as follows: Man is created in the image of God. His origins in the Garden of Eden were the results of divine acts. He is endowed, as a result, with certain innate rights. Among them is the right to enjoy the fruits of his labors. The ultimate right of private property vests, therefore, in the individual. The results of an exercise of the right can be sold in the form of goods or services. The exercise of the right can be delegated. The individual citizen delegates to his elected representatives the right to modify or control the exercise of the right of private property. He does so through the democratic process in concert with his fellow citizens. The statement that the right of private property is received by delegation from organized society is correct, therefore, for all practical purposes. The corporation, for example, is an artificial entity that is created by law. Its rights and powers, including the right to hold and use property, are restricted by its charter of incorporation. The property rights of corporate stockholders are modified accordingly. The authority of the corporate executive is received by delegation from these stockholders, through the board of directors.

A strong religious argument can be and has been developed to the effect that advanced forms of socialism, whether evolutionary or revolutionary, tend to be unmoral. The initial force that advances socialism is frequently the desire of the "have not" pressure groups to expropriate by legal process, and redistribute in their own interests, the wealth of those who have more. It would appear to violate the biblical injunction against coveting one's neighbor's goods. The accomplishment of such objectives requires increasing delegations to the state of the right to modify and control the right of private property. The ultimate result is state capitalism, regardless of whether the individual still retains the fiction of title to his property. There is a principle of organization to the effect that the process of delegation relieves the delegator of none of his responsibility, authority and accountability. Delegation and abdication are not synonymous. It is possible, of course, to carry delegation to the point where one loses control of the situation for which one is responsible. Abdication has then taken place for all practical purposes. The penalty in business organization may be dismissal. The penalty in organized society may be an increasing loss of individual

liberty. It is the penalty that the individual citizen pays for an unmoral act; the excessive delegation, for the selfish purpose of promoting certain personal interests, of a right that inheres in him as an individual by reason of his divine origins.

The term "secular" refers to things that are of or pertain to the worldly or temporal, as distinguished from the spiritual or eternal. They are not religious in character nor are they devoted primarily to religious ends or usages. The business organization is an economic institution. Its primary objectives are certain economic values that are desired by customers. It can not continue long in a state of economic health unless it is able to produce and sell these values to the public, competitively, at a profit. Any statement of management fundamentals in business merely supplies a basis for effective thought and action in the accomplishment of business objectives. Any such statement must be secular primarily, since the objectives of the business organization are primarily economic.

It does not follow, however, that a philosophy of management should or need not have any relation to moral philosophy. General executives in most business organizations appear to be concerned greatly with current problems of customer and dealer relations, governmental relations, labor relations, stockholder relations, supplier relations, and all of the other relations of the business organization, both poor and rich. Any effective business relations usually depend on confidence. We seldom have confidence in individuals or groups whose ethics are questionable. Any acceptable code of ethics must be in conformity with those moral principles that are generally held in the community, state and nation. These principles have their roots in whatever are the dominant religions.

The concepts of individual liberty, democracy, free enterprise and the right of private property are related inextricably to one another. A philosophy of management must first supply a basis for the accomplishment of the primary service objectives of the business organization. Its executive leadership must apply this philosophy with due regard for collateral objectives, both social and personal. Management has to do primarily with the job of planning, organizing and controlling the work of a business establishment, large or small. The reviewer feels that there is an "unbalance" in viewpoint because more direct references to Carl Snyder, Heyek, Von Mises and certain others have not been given. The author is familiar with the writings of these men. They have affected his thinking, no doubt. He did not write a book on economic, moral or political philosophy however. He wrote a book that deals primarily with just what the title says, "The Fundamentals of Top Management".

It is admitted, however, that the philosophy of American management probably will become an instrument of public policy, when, as and if it is developed to the point of general understanding and acceptance. Management is a basic leadership function in any highly-developed industrial economy. The philosophy of the management of private enterprises can not be divorced from the economic doctrine of free enterprise or the political doctrine of democracy. The ethical concepts in any acceptable philosophy of management must be validated in terms of moral principles in terms of any particular religious sect or creed. We are trying to get a common understanding of our democratic concepts throughout the non-communist world. The Moslem civilization for example, is old and firmly established. The constitution of Pakistan, one of the newer members of the family of nations is based squarely on the teachings of Islam as set forth in the Kiran. We could not and would not deny to the citizens of any country the right to worship God in whatever form and manner they believe to be proper. It would be difficult certainly for our State Department to sell the concepts of individual liberty, democracy and free enterprise to a non-christian country, using some philosophy of management that was based on the specific tenets of some Christian creed. It would be difficult anyhow, unless it understood the philosophy of American Management. For these reasons also, any statement of American Management's philosophy must be primarily secular.

The author agrees with Harold Smiddy that a philosophy of management must be broad and basic; that it can not preach secularism. He believes, however, that it must be primarily secular; that it can not be primarily a politico-socio argument. The purpose of a philosophy of management in the United States is to help managers to manage individual free enterprises. That was the author's idea in writing the book on "The Fundamentals of Top Management", at least.

There is only one additional point, among many in a very thoughtful review, on which the author wishes to comment. His definition of control is not intended to carry with it any connotation of dictatorial compulsion. He does not believe that it does. He feels that the break-down of the management function into its organic sub-functions is important. It serves two practical purposes: It facilitates the indoctrination of executive and operative personnel on lower echelons with sound managerial principles. It has been so used in many business and military organizations. Some minimum of managerial indoctrination is necessary for a maximum delegation of responsibility and authority, an intelligent exercise of initiative and other advantages of a good organization. Such a break-down also is the basis of any logical doctrine of staff evolution. It is therefore the basis of any logical staff organizational planning and policy development. The author boiled down the basic management functions into three—planning, organization and controlling—because this appeared to be most helpful in solving problems of the latter kind.

The author can do nothing about the danger of dictatorial compulsion. That problem is the responsibility of the People. Any sound principles can be misapplied. Their misapplication renders them none the less sound. That is one reason why dictators have often found it unnecessary to seize governments by military force. The People have voted them in. The arguments that induced them to do so appeared sound, and produced short-run benefits that satisfied the personal objectives of important pressure groups.

I should like to conclude by expressing again my appreciation of an excellent, competent review by Harold Smiddy.

RALPH C. DAVIS

Professor of Business Organization

The Ohio State University

BASIS FOR VARIATION

By HAROLD E. SMALLEY

Assistant Professor of Industrial Administration and Supervisor of Motion and Time Study Laboratory, University of Connecticut

This time study technique is in operation in several industrial plants with apparent success.

ONE OF THE PROBLEMS which faces the time study man in his attempt to set time standards or piece rates is to determine the proper *basis for variation.* In most instances this is a simple matter of expressing the time standard or the piece rate in terms of production units or pieces produced. Standards expressed as minutes per piece, per hundred pieces, per dozen, per gross, per ton, etc., are very common in everyday time study practice. There are instances, however, in which a simple physical variable, such as pieces or pounds, is not the proper basis for variation. In some cases, complex variables having interaction are at work. Under such circumstances, no single variable will serve as a proper basis for variation. There are methods of finding the proper basis for variation without having to resort to unreliable averages.

As a time study man for a company that manufactures some 10,000 different kinds and sizes of parts, you have been assigned the task of setting up an incentive for the *picking* operation in the warehouse. The operator fills a customer's order by picking parts from stockroom bins. The quantities, sizes, and kinds of parts vary considerably from one order to another.

After some preliminary studies, you decide that it is not practical to set up a separate normal time for each size of each kind of part. Your problem is further complicated by the fact that on some days, the orders call for mostly large parts, while on other days, they show a preponderance of small parts. All attempts by you to work with averages secured from several all-day studies fail because of the wide variation in customer demands.

If you express the average normal time as a function of *pieces,* the operator's earnings will be prohibitive on days when mostly small parts are ordered, and he will go into the red on days when large parts are popular. Conversely, average normal time as a function of *pounds* will result in the opposite extreme.

After considerable sweat and tears, you decide that the normal time for "pick parts from bin" is a function of two dependent variables, *pieces* and *pounds.*

INCENTIVE STANDARDS

Your problem is, of course, to determine a method of setting up an incentive standard which will truly reflect the appropriate effects of *pieces* and *pounds.*

To serve as a sample calculation and to investigate this problem, you have chosen a certain kind of part in standard sizes of 1/8", 1/4", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 3", 5", and 6". From your all-day studies, you have pulled off "number of pieces" and "normal time" for each size as follows:

Size	Pieces	Normal Time
1/8"	100	3.00
1/4"	150	5.00
1/2"	200	7.00
3/4"	200	8.00
1"	200	8.00
1 1/4"	100	5.00
1 1/2"	200	10.00
2"	100	6.00
3"	50	6.00
5"	10	2.00
6"	10	3.00

From the Company Sales Bulletin, you find the weights of these parts to be:

1/8"	.10#	1 1/2"	2.00#
1/4"	.20#	2"	3.00#
1/2"	.40#	3"	8.00#
3/4"	.75#	5"	20.00#
1"	1.00#	6"	30.00#
1 1/4"	1.50#		

It is obvious that part of the normal time is attributable to *pieces* and part is attributable to *pounds.*

Let:

a = normal time per piece
b = normal time per pound
x = number of pieces
y = number of pounds
z = total normal time

Then:

ax = normal time attributable to pieces
by = normal time attributable to pounds

And:

$$ax + by = z \quad \ldots\ldots\ldots (1)$$

Since for each of the sizes Equation 1 applies, we have eleven (11) independent equations with only two (2) unknowns, a and b. Our objective is to find a value for a and a value for b which will best satisfy all eleven equations. The method of least squares may be employed to yield such values.*

Two simultaneous equations may be expressed in the following form:

$$a\Sigma x^2 + b\Sigma xy = \Sigma xz \quad \ldots\ldots\ldots (2)$$
$$a\Sigma xy + b\Sigma y^2 = \Sigma yz \quad \ldots\ldots\ldots (3)$$

*For more information, consult a standard text in statistics or see "Mechanical Engineers' Handbook", Lionel S. Marks, McGraw-Hill Book Company, New York, 1941, pp. 121-122.

The data given previously together with that called for in Equations 2 and 3 are summarized in the following table: See Figure 1.

The footings thus secured may be substituted in Equations 2 and 3 as follows:

$$(2)\ 215{,}200a + 241{,}500b = 9{,}100$$
$$(3)\ 241{,}500a + 632{,}400b = 13{,}790$$

Solving these two equations simultaneously yields values of

$$a = .031$$
$$b = .010$$

The values thus determined represent the ones which most nearly satisfy all eleven sizes. The normal time for "pick parts from bin" will therefore be .031 minute per piece plus .010 minute per pound. In order to check the reliability of this method, we can set up a table from which to compare the computed normal times with the actual normal times as secured from the all-day time studies. Such a table is listed below: See Figure 2.

The total error involved in using the method of least squares as opposed to having a separate normal time for each size can be determined by dividing the difference (+0.12) by the actual normal time (63.00). This yields a value of $\frac{0.12}{63.00} = 0.2\%$.

The magnitude of this total error is some indication as to the reliability of this technique for determining normal time for elements which have a complex *basis for variation.*

The author does not claim to be the originator of this technique, but he has seen it in operation in several industrial plants with apparent success.

In the illustration shown previously only a sample of sizes of a given part were chosen. In practice, one could secure what he feels is a representative sample of all sizes of all kinds of parts, perform the mathematical technique of least squares, and arrive at normal time per piece and normal time per pound for as large a variety of sizes and kinds as desired. The biggest advantage of this technique is its ability to cover as many different sizes and kinds of parts as possible without individual normal times and without unduly reducing the degree of accuracy desired.

Figure 1

Size	*Wt/Pc*	*Pcs*		*Lb.*			N.T.		
		x	x^2	*y*	y^2	*xy*	*z*	*xz*	*yz*
1/8	.10	100	10,000	10	100	1,000	3	300	30
1/4	.20	150	22,500	30	900	4,500	5	750	150
1/2	.40	200	40,000	80	6,400	16,000	7	1,400	560
3/4	.75	200	40,000	150	22,500	30,000	8	1,600	1,200
1	1.00	200	40,000	200	40,000	40,000	8	1,600	1,600
1 1/4	1.50	100	10,000	150	22,500	15,000	5	500	750
1 1/2	2.00	200	40,000	400	160,000	80,000	10	2,000	4,000
2	3.00	100	10,000	300	90,000	30,000	6	600	1,800
3	8.00	50	2,500	400	160,000	20,000	6	300	2,400
5	20.00	10	100	200	40,000	2,000	2	20	400
6	30.00	10	100	300	90,000	3,000	3	30	900
Σ			215,200		632,400	241,500		9,100	13,790

Figure 2

Size	*Pcs*	*N.T.*	*Computed N.T.*	*Diff.*	*% Diff*
1/8	100	3.00	3.20	−.20	7
1/4	150	5.00	4.95	+.05	1
1/2	200	7.00	7.00	0	0
3/4	200	8.00	7.70	+.30	4
1	200	8.00	8.20	−.20	3
1 1/4	100	5.00	4.60	+.40	8
1 1/2	200	10.00	10.20	−.20	2
2	100	6.00	6.10	−.10	2
3	50	6.00	5.55	+.45	8
5	10	2.00	2.31	−.31	16
6	10	3.00	3.31	−.31	10
		63.00	63.12	+.12	

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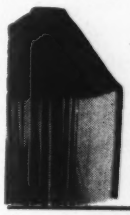

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SOCIETY NEWS

CONFERENCE IN MILWAUKEE

THE MILWAUKEE CHAPTER of S.A.M. presented a two day conference on Methods-Time-Measurement at the Pfister Hotel on December 6 and 7. William K. Hodson of Methods Engineering Council of Pittsburgh reviewed the history and development of MTM and discussed the technical aspects of it. He also emphasized that the technique can be used to improve human relations in industry. Mr. Hodson demonstrated the system by pulling a fountain pen out of his pocket and showing the various moves necessary to screw on the cap. With the audience keeping "score" on prepared time charts, Mr. Hodson showed the application of the system to this and more complicated mechanical devices.

Rex Reeder, executive vice-president of the Marine National Bank discussed "Business Management and Its Goals" at the luncheon. Donald E. Cox of Tracksson Co. headed the demonstration crew which devoted itself to demonstrations of MTM as it applies to simple operations.

George E. Keck, superintendent of work analysis for United Air Lines introduced the subject of how "United Air Lines Uses MTM" and described the extent of facilities and personnel of United and its post war program to reduce costs of operations. The decision to combine the Cheyenne and San Francisco overhaul bases led to the urgent necessity for setting new standards, but per management's request the stop watch was used at a minimum.

The Harrington Emerson Award Trophy, which was accepted for the Milwaukee Chapter at the Annual Fall Conference of S.A.M. held in New York, by William S. Ford, last year's chapter president, was unveiled by Roger S. Hubbell, president of the Milwaukee Chapter this year.

Dr. William Lammers, assistant school superintendent who spoke at the luncheon meeting pointed out that the most important single factor in managerial success is the good human relations. Dr. Lammers suggested that "When in doubt, be polite. Make friends before you 'use' them. And build good will through casual contacts."

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As of November 1951

CHAPTER	MONTHLY & ANNUALLY
Greensboro	1395
Pittsburgh	1285
Washington	1254
Allentown	1115
Hudson Valley	1107
Milwaukee	979
Boston	855
Trenton	847
N. New Jersey	811
New Brunswick	774
Chicago	748
Indianapolis	728
Philadelphia	719
Detroit	661
Atlanta	609
Baltimore	594
New York	584
Wilkes-Barre	564
Wilmington	451
Worcester	444
Central Pa.	439
Cleveland	432
Lancaster	388
St. Louis	344
Cincinnati	342
Montreal	321
Dallas	242
San Francisco	224
Portland	208
Western Mass.	202
Columbus	196
Manchester	192
Los Angeles	186
New Orleans	175
Richmond	145
New Haven	140
Birmingham	112
Central New York	104
Bridgeport	102
Louisville	60
Stamford	60
Knoxville	58
Providence	52
Dayton	45
Twin City	30
Hartford	16
Baton Rouge	12
Kansas City	—
Nashville	—

F. E. Oakhill, president of Prismacolor Pictures, Chicago was the final speaker of the conference.

HUSBAND AND WIFE TEAMS

THE WASHINGTON CHAPTER has recently found a new way of contacting more members and getting publicity through a rather unique plan called Scientific Management Applied to the Home. The executive committee of the Chapter has approved joint memberships for husband and wife teams. If one is a member, (or affiliate) the other automatically becomes eligible for the same privileges.

The executive committee believes that scientific management has a definite team concept and there are many areas where this idea can be applied. The home is no exception so each wife or husband is now being urged to participate in all functions of the Society.

This will be the topic of a series of round tables starting January 10, with "Family Goals and Values" as the first topic.

Dr. Lillian M. Gilbreth, internationally famous as an engineer, teacher, author, speaker, and mother sparked the initial start of the series at a December dinner meeting. Some of her experiences in home work simplification which appeared in "Cheaper By The Dozen" were outlined by Dr. Gilbreth.

Mary Rokahr of the Extension Service of the Agricultural Department and Edna Amidon of the Office of Education are Co-Chairmen of the Round Table project.

DAYTON'S M.T.M. CONFERENCE

THE DAYTON CHAPTER presented the First Annual Management Conference on M.T.M. at the Biltmore Hotel on January 17th and 18th. M. F. Feldstein, Manager of Inspections and Standards of Delco Products talked on the subject of "Approaches to Work Measurement." The "History and Development of M.T.M." was presented by W. K. Hodson, Management Engineer of Methods Engineering Council of Pittsburgh and H. O. Davidson of Ohio State University, the luncheon guest speaker spoke on the subject of "The Future of Methods Engineering." There were several demonstrations which showed the application of M.T.M. to simple manual and machine operations and also to complex manual and machine operations.

FIRST ANNUAL TIME STUDY CLINIC

THE ALLENTOWN, PA. CHAPTER held its first Annual Time Study Clinic in cooperation with Lehigh University on February 1, 1952.

The featured speaker was Phil Carroll, Management Consultant, and author of "Timestudy For Cost Control." Mr. Carroll discussed the techniques required to take "good" time studies and their application during the actual observation of the worker.

Robert Heiland, Assistant Professor of Industrial Engineering of Lehigh University talked on "The Ratio-Delay Study as a Tool of Industrial Engineering." He outlined the use and application of this new technique which has wide and varied applications.

Clem Zinck, Consultant in Industrial Engineering discussed "The Rating Line," a proven technique for self correction of rating by the timestudy man or men, when two or more studies are taken of the same element.

The talks were given in the morning with the Rating Session held in the afternoon. Each clinic participant rated individually and according to his own system, the 24 operations of the S.A.M. "Rating of Time Study" films. The ratings of each individual were compared with the accepted rating of the film and the checked ratings were returned to each participant for his future guidance. This individual participation was extremely effective.

BIG MANAGEMENT EVENT IN INDIANAPOLIS

Principal figures in the management phase of Indianapolis business gathered at the Hotel Severin, December 5th for the annual conference of the Indianapolis Chapter. With the theme of "Why Industrial Engineering" the sessions included discussions of incentive plans, job evaluation, production control and problems in the industrial engineering field.

Speakers included William Y. Hutchinson, general supervisor of wage administration for International Harvester Company who said "the role of the industrial engineer is one of the keys to a higher American standard of living." John A. Patton, co-author of the book "Job Evaluation" and head of his own Chicago management engineering firm, John A. Patton Management Engineers Inc. and Ford R. Larrabee, vice president in charge of manufacturing of Cincinnati Industries, Inc. spoke on various phases of the work and then participated in a round-table panel discussion. Also present as speaker was Charles M. Wilbur, the I.B.M. special representative for manufacturing control, an authority in the field of production control.

CALIFORNIA INSTITUTE

THE FOURTH ANNUAL INDUSTRIAL ENGINEERING INSTITUTE of the University of California will be presented in February with the cooperation of S.A.M. For the first time the program will be offered in two places. On February 1 and 2 in Berkeley, Calif., at the University and on February 4 and 5 in Los Angeles.

The meetings will include sessions on Training in Industrial Engineering, Analysis of Work Measurement, Quality Control, Industrial Engineering in Smaller Companies and Office Work Simplification. The S.A.M. Rating Films will also be shown. All of those attending will receive copies of the Proceedings of the sessions.

Professor Ralph Barnes of S.A.M. will be chairman of the Los Angeles meetings.

NACA RESEARCH COMMITTEE APPOINTEE IS S.A.M. MEMBER

Donald P. Sweetser, a director of the New York Chapter of the National Association of Cost Accountants, has been appointed a member of NACA's Committee on Research, which supervises research into problems and methods of industrial accounting.

A participating associate of Stevenson, Jordan & Harrison, Inc., industrial engineers, Mr. Sweetser is also a member of the Industrial Engineering Committee of the Society for the Advancement of Management.

JOINS THE NAVY

W. Gilbert Brooks of the Stamford Chapter of S.A.M., manager of the time study department of Pitney-Bowes, Inc., has been granted a year's leave of absence to take part in a program for reducing the operating costs of the Navy's far-flung industrial installations. Mr. Brooks will serve as an industrial engineer on work measurement in the Navy's Division of Industrial Surveys. Mr. Brooks will also be on leave from his post as dean of the Stamford Branch of the Bridgeport Engineering Institute.

DECEMBER S.A.M. CHAPTER ACTIVITIES

The Baltimore Chapter sponsored a Round Table discussion on the subject of "Work Measurement in Jobbing and Small Lot Size Plants." William H. Kirby, Jr. led the discussion and presented data he had accumulated at a variety of successfully operated jobbing plants. Mr. Kirby also prepared a resume of literature written by management consulting firms on the same topic. Louis Robinson, Jr. is Round Table Chairman for the Baltimore Chapter.

The Birmingham Chapter with G. E. Tucker of the Talladega Cotton Factory heard a very interesting discussion on Air Force Career Development as presented by Colonel Wilson T. Jones and Colonel Ralph W. Deppe of the Air Force. They pointed out the basic training offered to air force officers and how this training helped to qualify such officers for a career in industry.

The Boston Chapter heard John B. Lathrop of the operations research group of Arthur D. Little, Inc., who lectured on the subject of "The Use of Operations Research in the Solution of Management Problems." Mr. Lathrop pointed out the military use of Operations Research and the Industrial application of Operations Research, giving various examples of each. Earl S. Havner of Towle Manufacturing Company was chairman of the meeting.

The Central Pennsylvania Chapter presented Harry Boyer, President of the Pennsylvania C.I.O. Council at a co-sponsored meeting with the Labor-Management Relations curriculum of Pennsylvania State College. W. N. Leonard and A. H. Reede of the economics department of the College introduced Mr. Boyer who discussed the general problem of Worker Education as promoted by the Unions. He pointed out that it is especially desirable to have this particular work done by a neutral party so that any bias can be averted. Two important benefits which result from education of the worker, are, namely, he becomes a better union member and a better citizen. It was also pointed